CMT-RB5

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model

- CMT-RB5 is composed of following models.
  As for the service manual, it is issued for each component model, then, please refer to them.

COMPONENT MODEL NAME

	CMT-RB5
COMPACT DISC DECK RECEIVER SYSTEM	HCD-RB5
SPEAKER SYSTEM	SS-CRB5

- Abbreviation

AED : North European model
CND : Canadian model
KR : Korea model
AR : Argentine model
HK : Hong Kong model
MX : Mexican model
SP : Singapore model
TW : Taiwan model
MY : Malaysia model
AUS : Australian model
EE : East European model
CH : Chinese model

SPECIFICATIONS

General

Power requirements
- North American model : 120 V AC, 60 Hz
- European model : 230 V AC, 50/60 Hz
- Australian model : 220-240 V AC, 50/60 Hz
- Mexican model : 120 V AC, 60 Hz
- Korean model : 220 V AC, 50 Hz
- Other models : 110-120 V or 220-240V AC, 50/60 Hz
  Adjustable with voltage selector.

Power consumption
- North American and Mexican models : 50 watts
- Other models : 45 watts

Dimensions (w/h/d) Approx. 180 x 130 x 315 mm incl. projecting parts and controls

Mass Approx. 4.0 kg

Supplied accessories

- Remote (1)
- Size AA (R6) batteries (2)
- AM loop antenna (1)
- FM lead antenna (1)
- Speaker cords (2)

Design and specifications are subject to change without notice.

PARTS LIST

Part No.	Description	Remark
	ACCESSORIES & PACKING MATERIALS	
	**********	
1-476-156-11	REMOTE COMMANDER (RM-SRB5)	
1-501-374-11	ANTENNA, LOOP (AM)	
1-501-594-11	CONNECTOR (F TYPE ADAPTOR)(AEP, UK, AED, EE, CIS)	
1-501-659-41	ANTENNA (FM)	
1-558-848-11	CORD, SPEAKER	
4-228-952-01	COVER,BATTERY (FOR RM-SRB5)	
4-231-285-11	MANUAL,INSTRUCTION (ENGLISH)(EXCEPT CH)	
4-231-285-21	MANUAL, INSTRUCTION (FRENCH)(US,CND)	
4-231-285-31	MANUAL, INSTRUCTION (FRENCH, SPANISH) (AEP, E, MX, AR, SP, MY)	
4-231-285-41	MANUAL, INSTRUCTION (GERMAN)(AEP)	
4-231-285-51	MANUAL, INSTRUCTION (DUTCH, ITALIAN, PORTUGUESE)(AEP)	
4-231-285-61	MANUAL, INSTRUCTION (RUSSIAN, POLISH)(EE,CIS)	
4-231-285-71	MANUAL, INSTRUCTION (CHINESE)(HK, SP, MY, TW)	
4-231-285-81	MANUAL, INSTRUCTION (KOREAN)(KR)	
4-231-285-91	MANUAL, INSTRUCTION (DANISH, FINNISH, SWEDISH)(AED)	

MICRO Hi-Fi COMPONENT SYSTEM

SONY

9-929-525-11

Sony Corporation
Audio Entertainment Group

2000I1672-1
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Published by General Enginnering Dept.

HCD-RB5

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model

- This set is the Amplifier and CD player section in CMT-RB5.

Model Name Using Similar Mechanism	NEW
CD Mechanism Type	CDM55C-K6BD38
Base Unit Name	BU-K6BD38
Optical Pick-up Name	KSM-213DCP

SPECIFICATIONS

Main Unit

Amplifier section

For the U.S. model

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 4-ohm loads, both channels driven, from 120 – 10,000 Hz; rated 15 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

US, Canadian and Mexican models:

Continuous RMS power output (reference):
15 + 15 watts
(4 ohms at 1 kHz, 10% THD)

European and Australian models:

DIN power output (Rated): 12 + 12 watts
(4 ohms at 1 kHz, DIN)
Continuous RMS power output (Reference):
15 + 15 watts
(4 ohms at 1 kHz, 10% THD)
Music power output (Reference):
28 + 28 watts

Other models:

The following measured at 220 V AC, 50/60 Hz
DIN power output (rated): 10 + 10 watts
(4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference):
12 + 12 watts
(4 ohms at 1 kHz, 10% THD)
The following measured at 240 V AC, 50/60 Hz
DIN power output (rated): 12 + 12 watts
(4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference):
15 + 15 watts
(4 ohms at 1 kHz, 10% THD)

Inputs
MD/VIDEO (AUDIO) IN (phono jacks):
voltage 500/250 mV, impedance 47 kilohms

Outputs
MD/VIDEO (AUDIO) OUT (phono jack):
voltage 250 mV, impedance 1 kilohm
PHONES (stereo minijack):
accepts headphones of 8 ohms or more.
SPEAKER:
accepts impedance of 4 to 16 ohms.
CD DIGITAL OUT OPTICAL:
Optical

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser (λ=780 nm)
	Emission duration: continuous
Laser output	MAX. 44.6 μW*
	*This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.
Frequency response	2 Hz – 20 kHz

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
US, Canadian model:	87.5 – 108.0 MHz (100 kHz step)
Other models:	87.5 – 108.0 MHz (50 kHz step)
Antenna	FM lead antenna
Antenna terminals	75 ohms unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
US, Canadian model:	530 – 1,710 kHz (with the interval set at 10 kHz) 531 – 1,710 kHz (with the interval set at 9 kHz)
European model:	531 – 1,602 kHz (with the interval set at 9 kHz)
Other models:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 kHz)
Antenna	AM loop antenna External antenna terminals
Intermediate frequency	450 kHz

General

Power requirements	
US, Canadian model:	120 V AC, 60 Hz
European model:	230 V AC, 50/60 Hz
Australian model:	220 – 240 V AC, 50/60 Hz
Korea, Chinese model:	220 V AC, 50/60 Hz
Mexican model:	120 V AC, 60 Hz
Other models:	110 – 120 V or 220 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	
US, Canadian and Mexican models:	50 watts
Other models:	45 watts
Dimensions (w/h/d)	Approx. 180 × 130 × 315 mm incl. projecting parts and controls
Mass	Approx. 4.0 kg
Supplied accessories	Remote (1) Size AA (R6) batteries (2) AM loop antenna (1) FM lead antenna (1) Speaker cords (2)

Design and specifications are subject to change without notice.

MICRO Hi-Fi COMPONENT SYSTEM

SONY®

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NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

This appliance is classified as a CLASS 1 LASER product.
The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

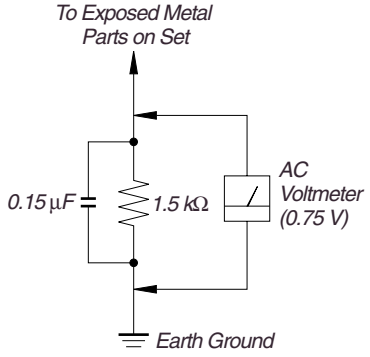
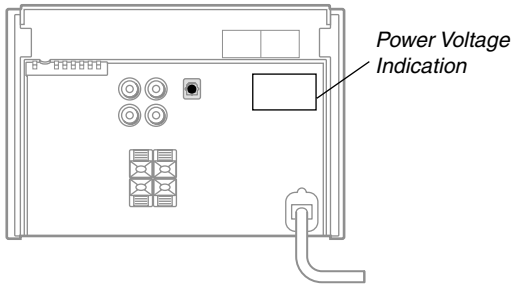


Fig. A. Using an AC voltmeter to check AC leakage.

MODEL IDENTIFICATION
– Back Panel –



Model	Power Voltage Incdication
US, CND, MX models	AC: 120 V 60 Hz 50 W
AEP, UK, AED, EE models	AC: 230 V 50 Hz 45 W
AUS, CIS, CH, models	AC: 220 – 240V 50/60 Hz 45 W
E, AR, HK, MY, SP, TW models	AC: 110 – 120/ 220 – 240 V 50/60 Hz 45 W
KR	AC: 220 V – 60 Hz 45 W

- Abbreviation

CND	: Canadian model.	AUS	: Australian model.
SP	: Singapore model.	MY	: Malaysia model.
AR	: Argentine model.	AED	: North European model.
MX	: Mexican model.	KR	: Korean model.
EE	: East European model.	HK	: Hong Kong model.
TW	: Taiwan model.	CH	: Chinese model.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.

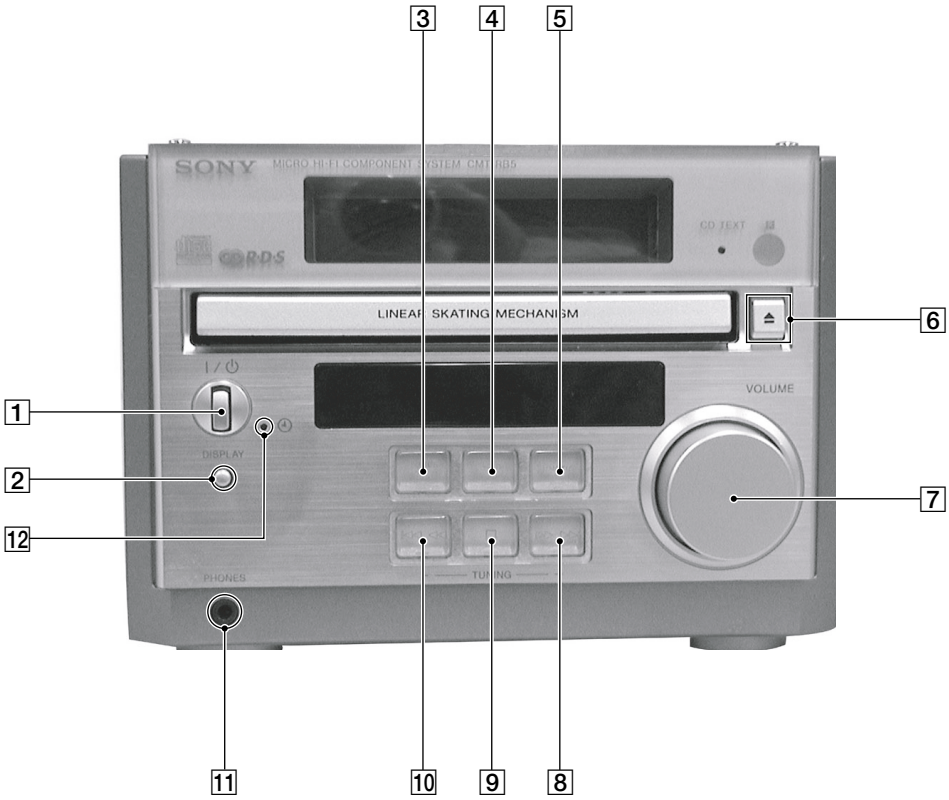
与安全有关的零部件须知

在原理图上用阴影及 ⚠ 标记来识别的零部件在安全操作上是具有关键性的。这些零部件要用本手册中所示的部件号对应的索尼零部件进行更换。

在安全操作上具有关键性的电路调整与索尼公司出版的维修手册完全一致。在更换关键零部件时或怀疑动作失常时，请进行这些调整操作。

SECTION 1
GENERAL

LOCATION OF CONTROLS
– Front Panel –

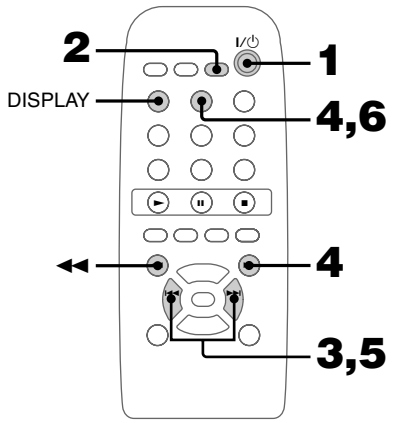


1 I/⏻ button
2 DISPLAY button
3 TUNER/BAND button
4 ▷II button
5 FUNCTION button
6 ⏏ button
7 VOLUME knob
8 ▷▷ ▷▷I button
9 □ button
10 I◁◁ ◁◁ button
11 PHONE jack
12 ◴ indicator

This section is extracted from instruction manual.

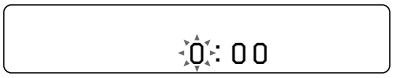
Step 2: Setting the time

You must set the time beforehand to use the timer functions.
The clock is on a 24-hour system for the European model, and a 12-hour system for other models. The 24-hour system is used for illustration purposes.



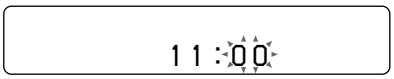
1 Turn on the system.

2 Press CLOCK/TIMER SET.
The clock appears and the hour indication flashes.



3 Press ⏮/⏭ to set the hour.

4 Press ENTER or ⏩.
The minute indication flashes.



5 Press ⏮/⏭ to set the minute.

6 Press ENTER.
The clock starts.

If you made a mistake

Press ⏪/⏩ repeatedly until the incorrect item flashes, then set it again.

To change the preset time

You can change the preset time while the system is off.

1 Press DISPLAY to display the clock.
2 Press CLOCK/TIMER SET.
3 Repeat steps 3 to 6 of “Setting the time.”

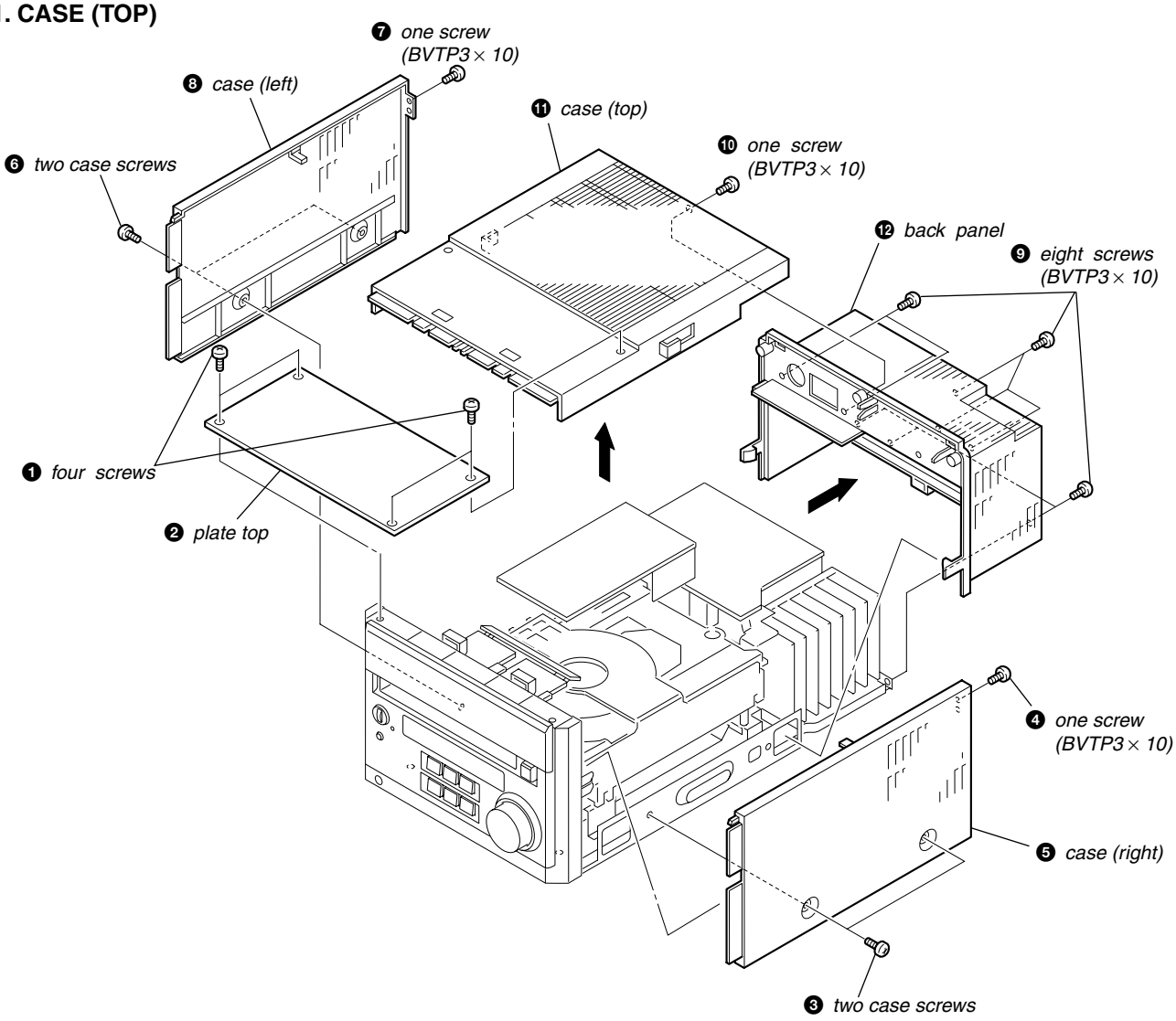
Tips

- The upper dot of the colon flashes for the first 30 seconds, and the lower dot flashes for the last 30 seconds of each minute.
- Each time you press DISPLAY while the system is off, the display switches between no display and the clock display.

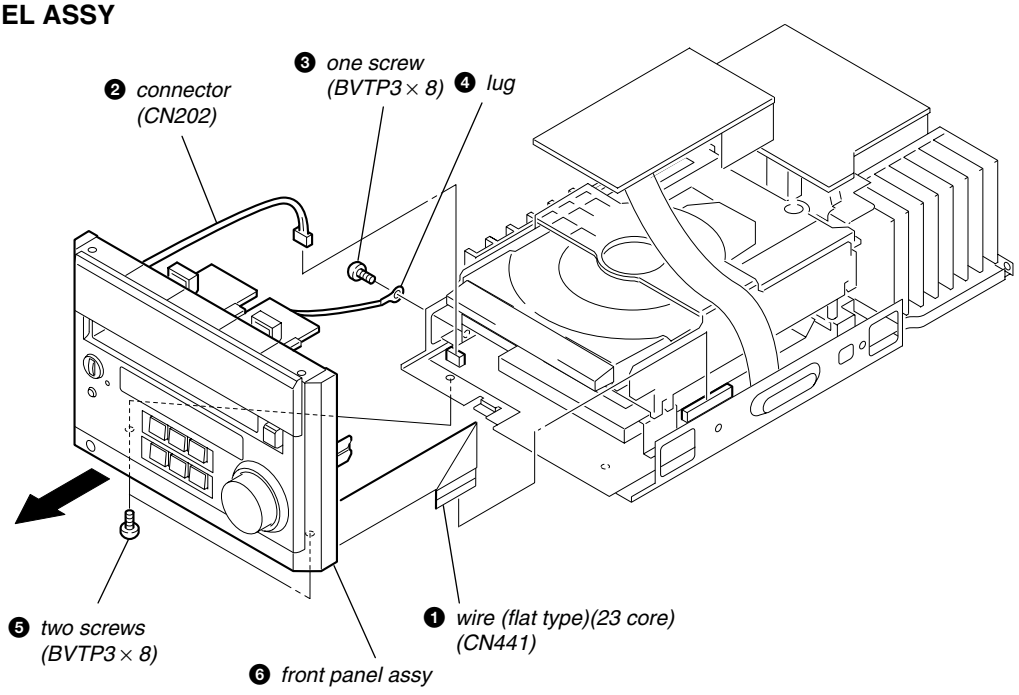
SECTION 2
DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

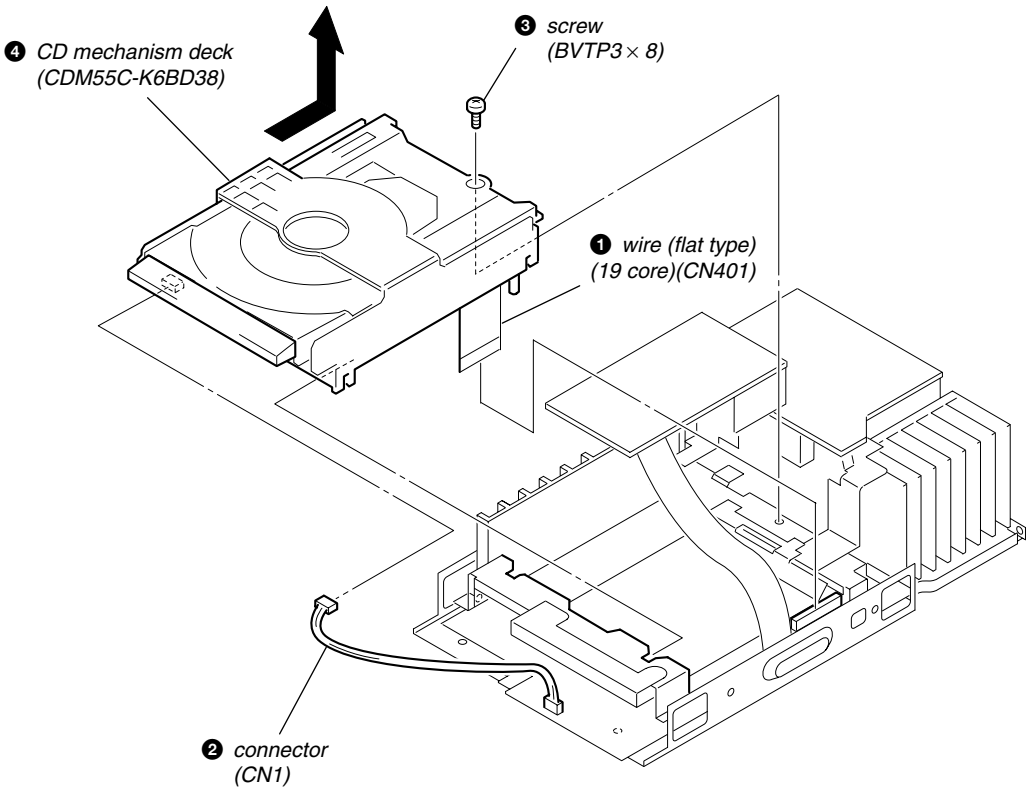
2-1. CASE (TOP)


❼ one screw (BVTP3 × 10)
❽ case (left)
❻ two case screws
⓫ case (top)
❿ one screw (BVTP3 × 10)
⓬ back panel
❾ eight screws (BVTP3 × 10)
❶ four screws
❷ plate top
❹ one screw (BVTP3 × 10)
❺ case (right)
❸ two case screws

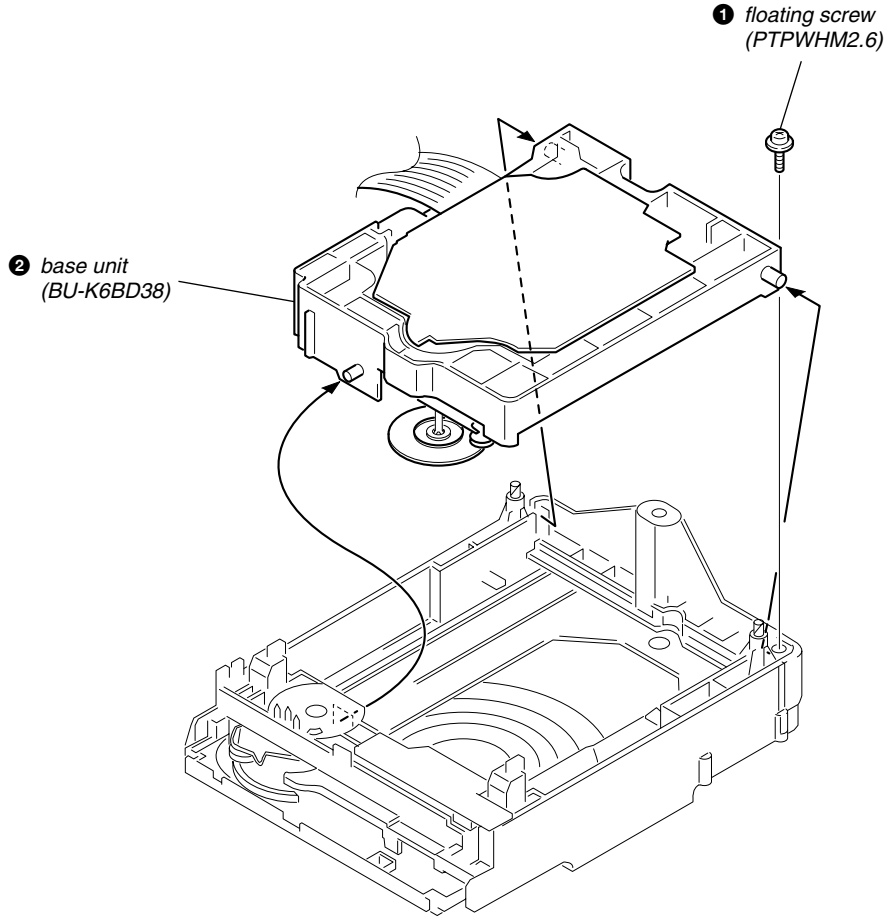
2-2. FRONT PANEL ASSY



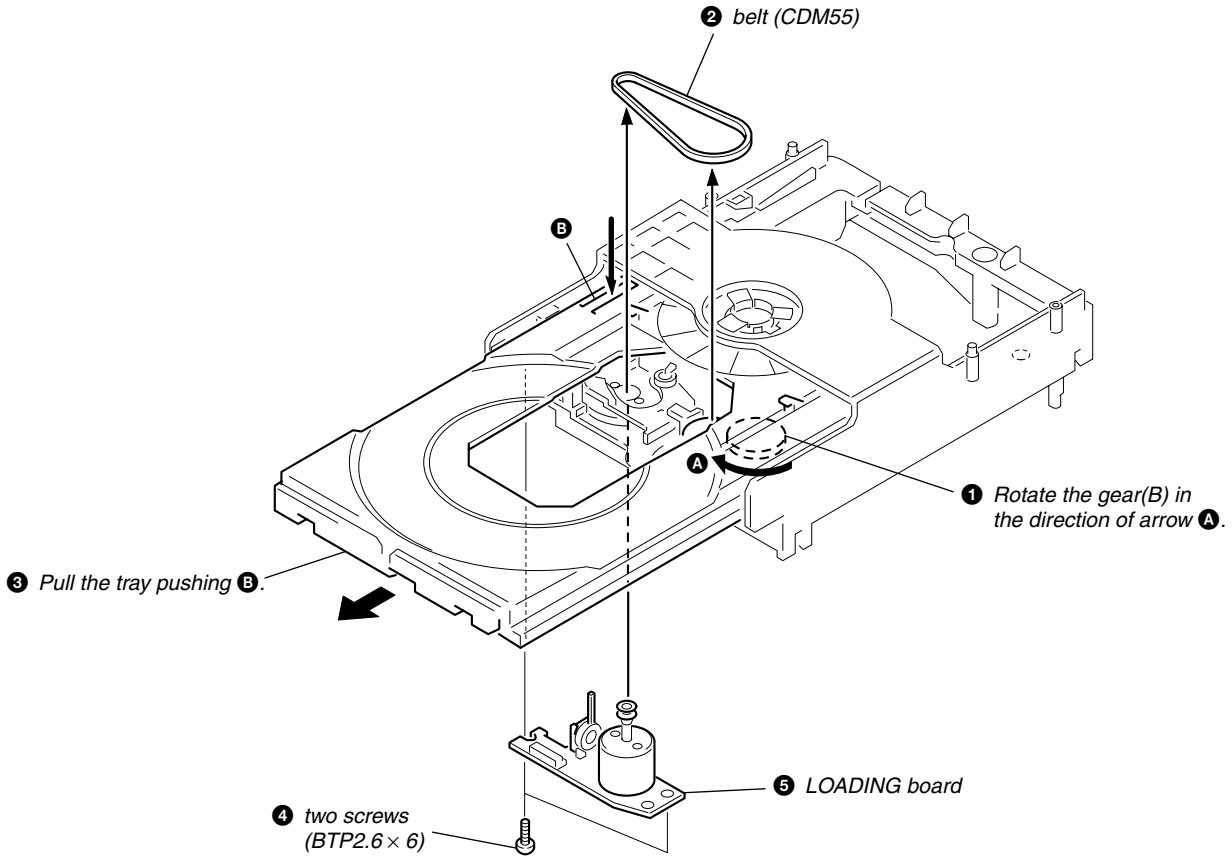
2-3. CD MECHANISM DECK (CDM55C-K6BD38)



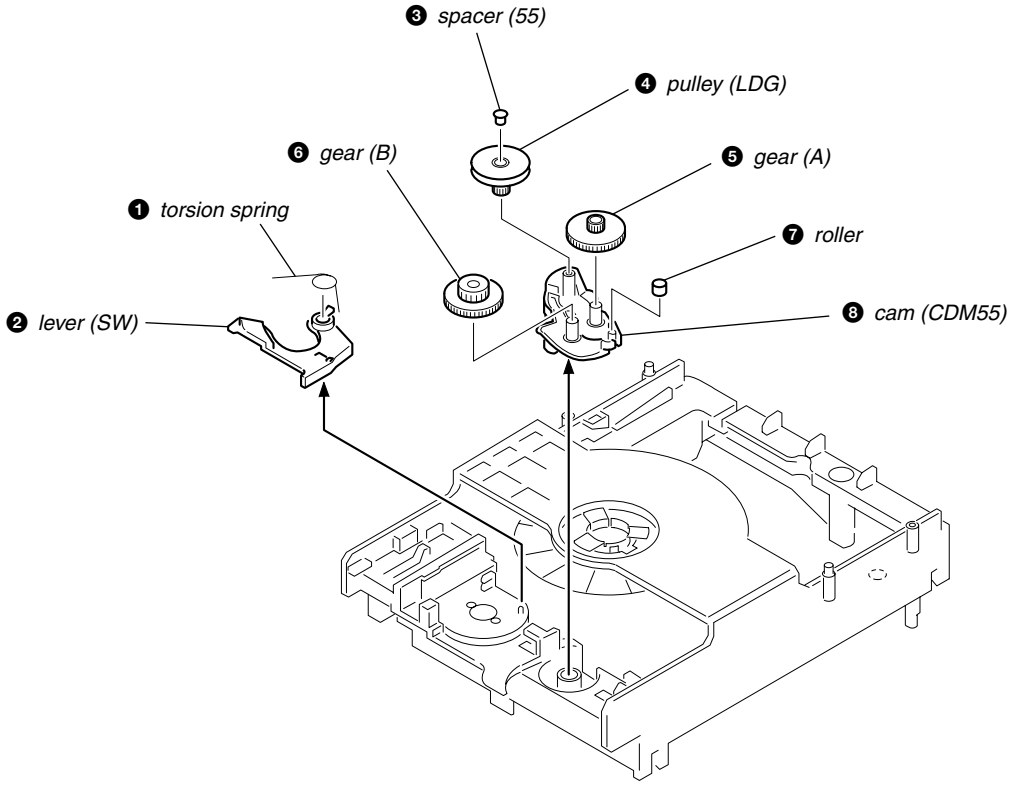
2-4. BASE UNIT (BU-K6BD38)



2-5. LOADING BOARD



2-6. CAM (CDM55C-K6BD38)



SECTION 3
SERVICE MODE

[Panel Test Mode]

Procedure:

1. Set to standby state.
2. Press three buttons of ☐ , I/⏻ , and ▷II simultaneously.
3. Liquid crystal display and LED are all turned on.
4. Pless ⏏ to enter the version display mode.
5. Press ▷II to enter the KEY, VOL, check mode. (⏮ ◁◁ and ▷▷ ▷▷⏭ must be pressed for several seconds.)
6. To exit from this mode, press the buttons in the same way as step 2.

[Aging Mode]

This mode can be used for operation check of CD section.

Procedure:

1. Load a CD disc.
2. Set to standby state.
3. Press three buttons of ☐ , DISPLAY , and ▷II simultaneously.
4. The aging is executed in bellow sequence.
5. To exit from the aging mode, press the I/⏻ button to turn the power OFF.

[Cold Reset]

Clears all the memories and starts up the machine again.

Procedure:

1. Set to standby state.
2. Press three buttons of ☐ , I/⏻ , and FUNCTION simultaneously.

[Hot Reset]

Starts up the machine again holding the memory data.

Procedure:

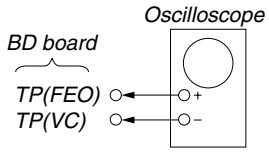
1. Set to standby state.
2. Press three buttons of ☐ , I/⏻ , and FUNCTION simultaneously.

SECTION 4
ELECTRICAL ADJUSTMENTS

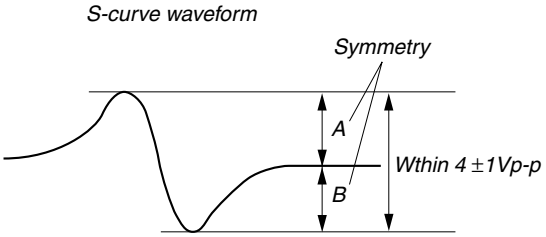
CD SECTION

Note :
1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-Curve Check



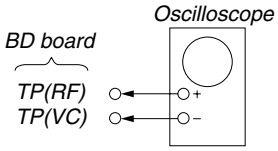
Procedure :
1. Connect oscilloscope to TP (FEO).
2. Connect between TP (FEI) and TP (VC) by lead wire.
3. Connect between TP (AGCCON) and TP (DGND) by lead wire.
4. Turn Power switch on.
5. Load a disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
6. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 4 ±1 Vp-p.



7. After check, remove the lead wire connected in step 2 and 3.

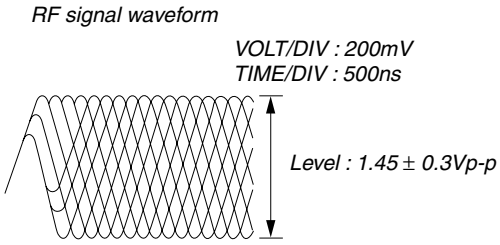
Note : • Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

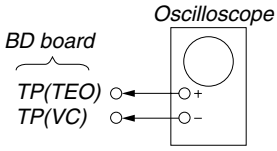


Procedure :
1. Connect oscilloscope to TP (RF).
2. Connect between TP (AGCCON) and TP (DGND) by lead wire.
3. Turned Power switch on.
4. Load a disc (YEDS-18) and playback.
5. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.
6. After check, remove the lead wire connected in step 2.

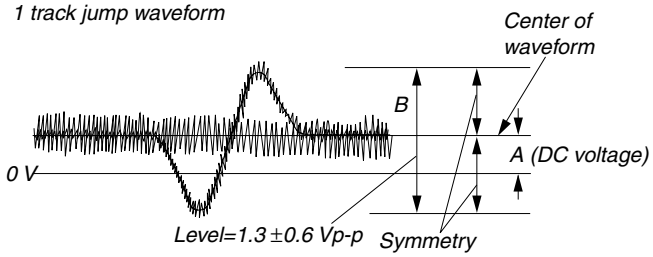
Note : Clear RF signal waveform means that the shape " ◊ " can be clearly distinguished at the center of the waveform.



E-F Balance (1 Track jump) Check



Procedure :
1. Connect oscilloscope to TP (TEO) and TP (VC).
2. Turned Power switch on.
3. Load a disc (YEDS-18) and playback the number five track.
4. Press the ▮▮ button. (Becomes the 1 track jump mode.)
5. Confirm that the level B and A (DC voltage) on the oscilloscope waveform.

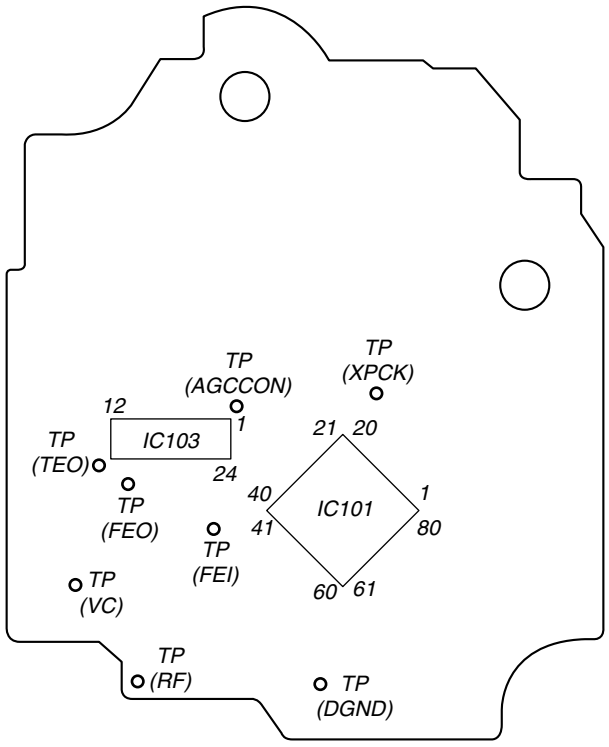


Specified level: $\frac{A}{B} \times 100$ = less than ± 22 %

6. After check, remove the lead wire connected in step 1.

Adjustment Location:

[BD BOARD] (Conductor Side)



SECTION 5
DIAGRAMS

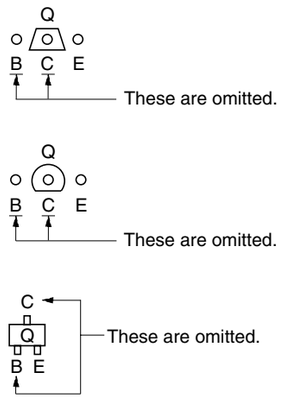
NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Board:

- ○——— : parts extracted from the component side.
- △ : internal component.
- ▒▒▒ : Pattern from the side which enables seeing.

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

- Indication of transisitor.



Note on Schematic Diagram:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

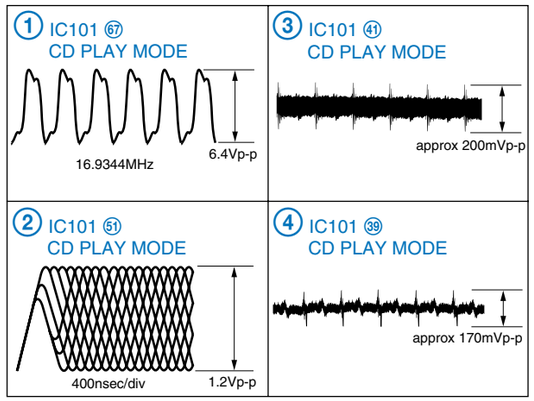
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。	

- B+ : B+ Line.
- B− : B– Line.
- : adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : TUNER (FM/AM)
  - : CD PLAY (ANALOG OUT)
  - : CD PLAY (DIGITAL OUT)

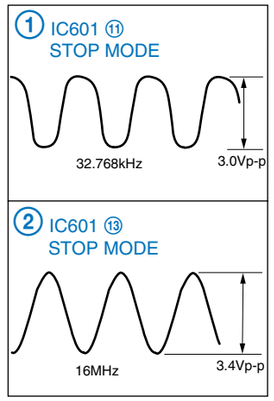
- Abbreviation
  - CND : Canadian model.
  - AUS : Australian model.
  - SP : Singapore model.
  - MY : Malaysia model.
  - AR : Argentine model.
  - AED : North European model.
  - MX : Mexican model.
  - KR : Korean model.
  - EE : East European model.
  - HK : Hong Kong model.
  - TW : Taiwan model.
  - CH : Chinese model.

5-1. Wavefoarms

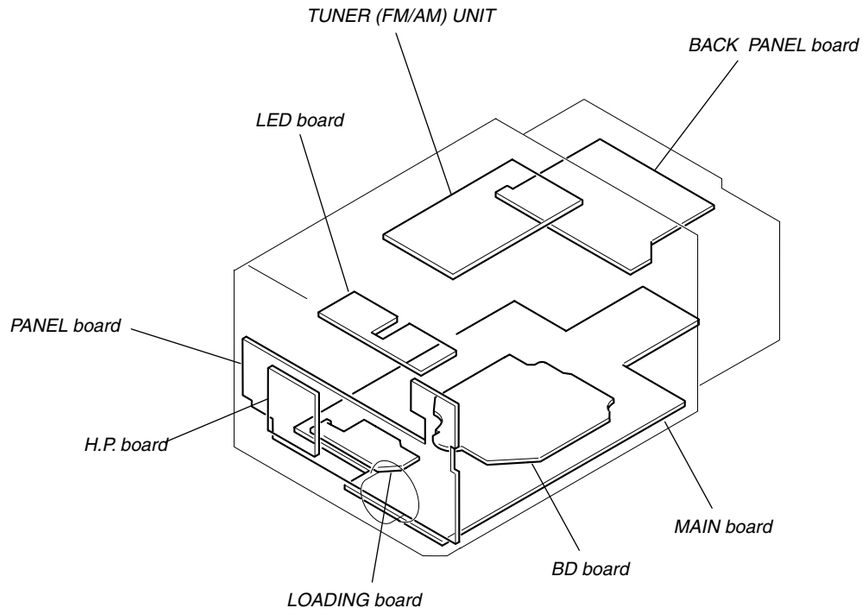
– BD BOARD –



– MAIN BOARD –



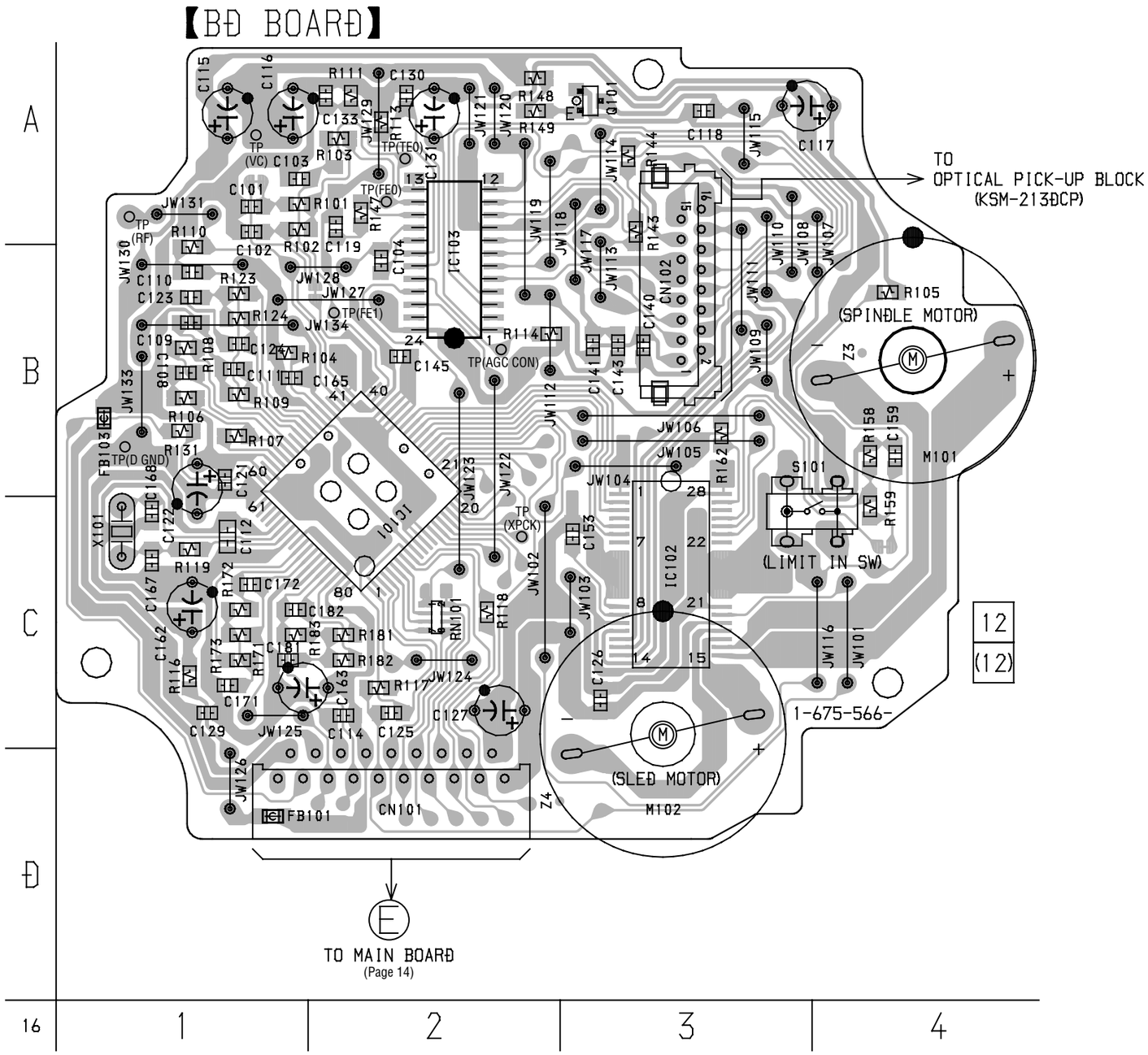
5-2. CIRCUIT BOARDS LOCATION



5-3. PRINTED WIRING BOARD –BD SECTION– • See page 11 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
IC101	C-2
IC102	C-3
IC103	B-2
Q101	A-3



5-4. SCHEMATIC DIAGRAM –BD SECTION–

- See page 11 for Waveforms.
- See page 22 for IC Block Diagrams.

【BD BOARD】

IC101
DIGITAL SERVO,
DIGITAL SIGNAL PROCESSOR
Ð/A CONVERTER
IC101
CXD2587Q

IC103
RF AMP
IC103
CXA2568M-T

IC102
BA5974FP-E
MOTOR ÐRIVER

OPTICAL PICK-UP BLOCK
(KSM-213DCP)
PHOTO DETECTOR
LÐ POWER ADJ
FCS COIL
TRKCOIL 2 AXIS
LÐ
PÐ

Q101
MSB710-RT1
LÐ ÐRIVE

M102
(SLED MOTOR)
M101
(SPINDLE MOTOR)

SPÐ1
SIO1
LIMIT IN SW

CN102
16P

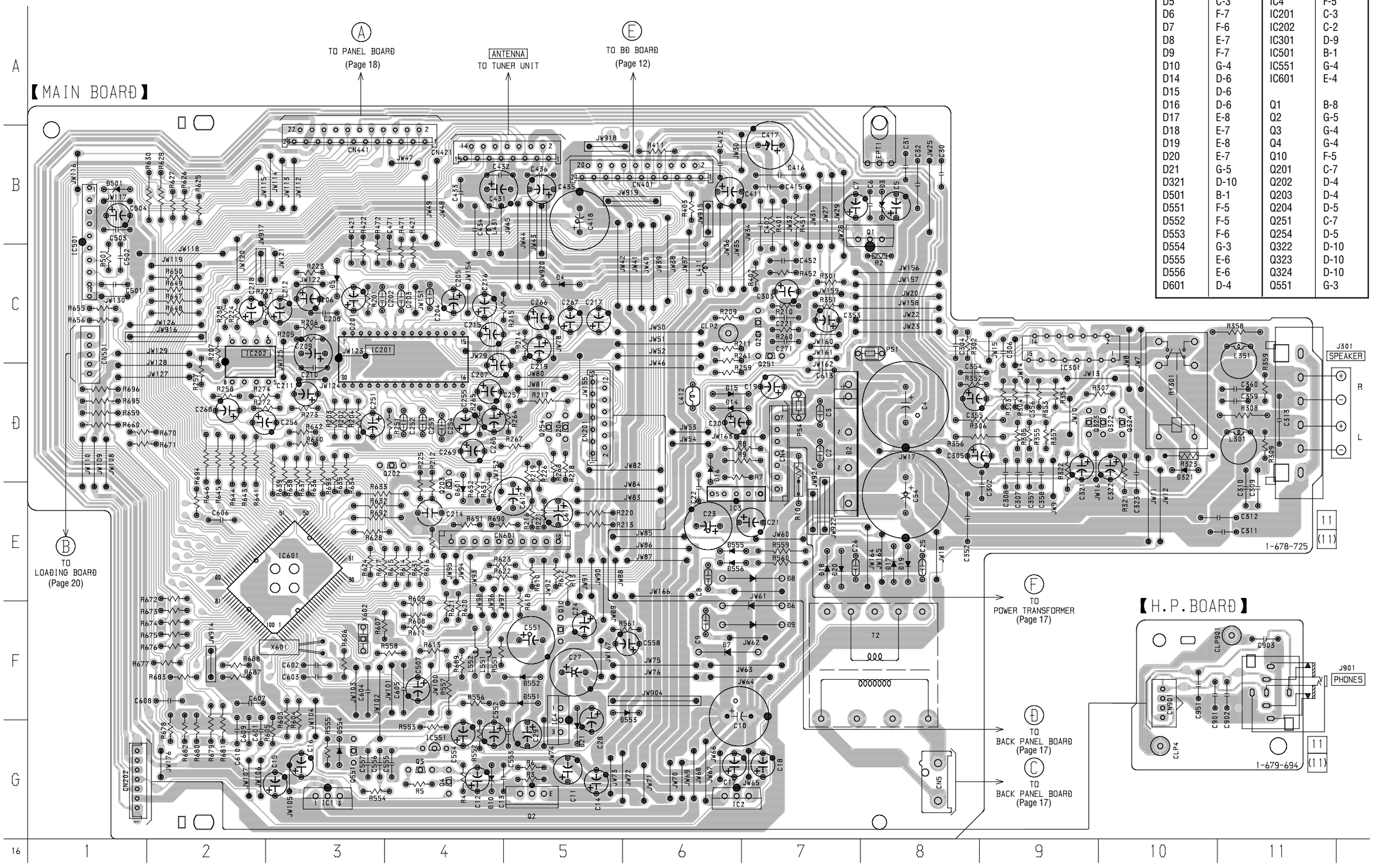
CN101
19P

TO MAIN BOARÐ
(PAGE 16)

5-5. PRINTED WIRING BOARDS –MAIN SECTION–

• See page 11 for Circuit Boards Location.

There are a few cases that the part printed on this diagram isn't mounted in this model.

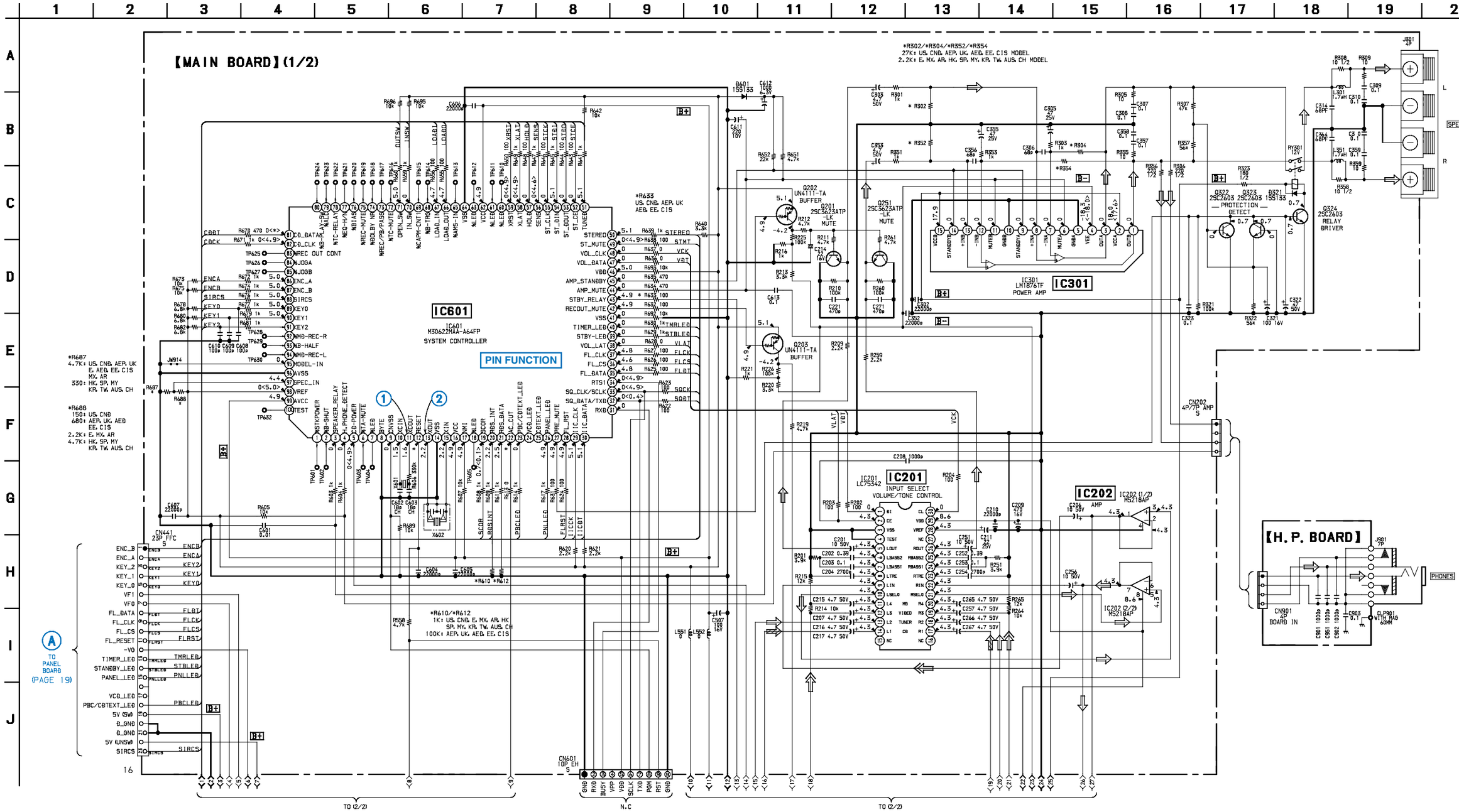


• Semiconductor Location

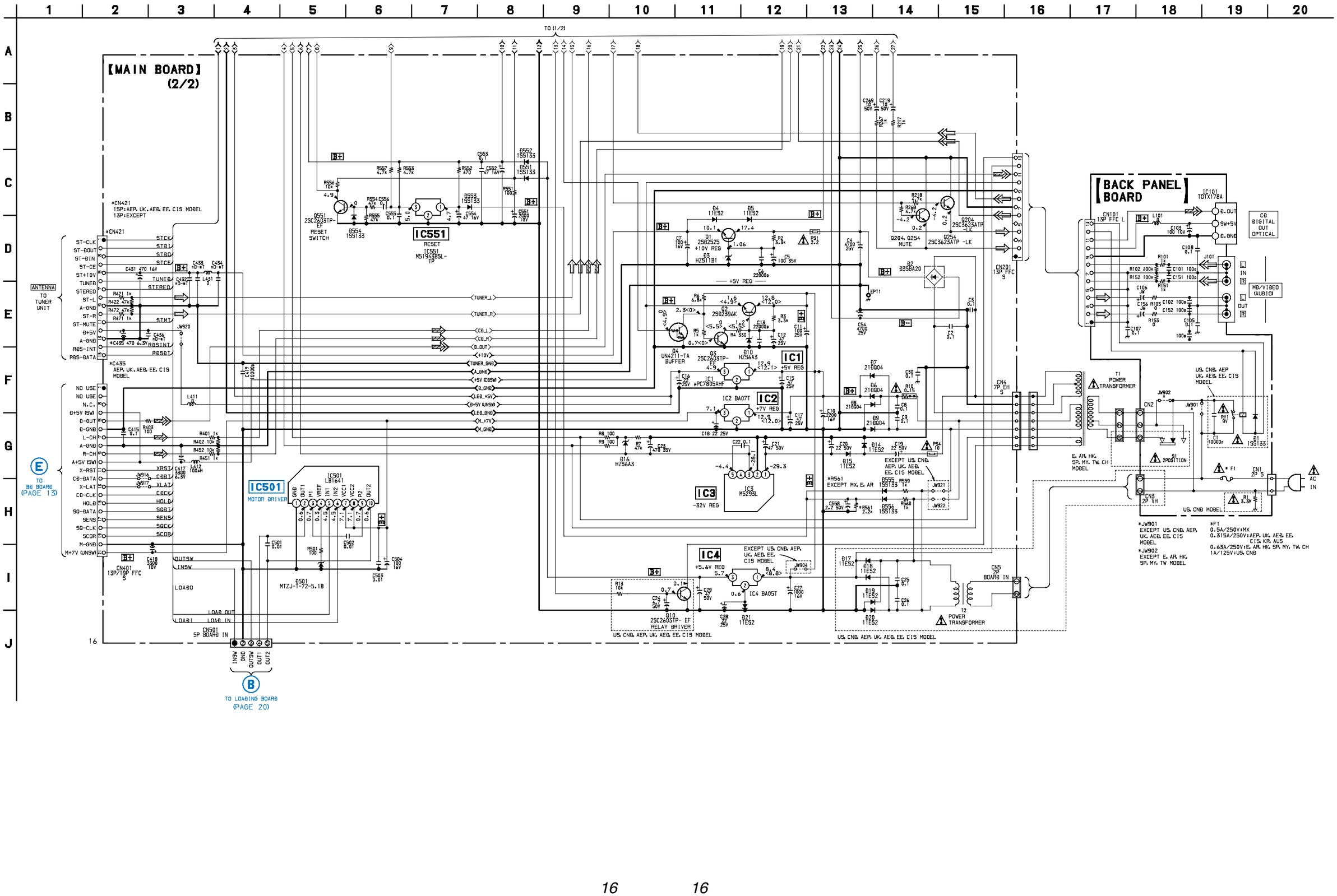
Ref. No.	Location	Ref. No.	Location
D2	D-7	IC1	G-3
D3	B-8	IC2	G-6
D4	C-5	IC3	E-6
D5	C-3	IC4	F-5
D6	F-7	IC201	C-3
D7	F-6	IC202	C-2
D8	E-7	IC301	D-9
D9	F-7	IC501	B-1
D10	G-4	IC551	G-4
D14	D-6	IC601	E-4
D15	D-6		
D16	D-6	Q1	B-8
D17	E-8	Q2	G-5
D18	E-7	Q3	G-4
D19	E-8	Q4	G-4
D20	E-7	Q10	F-5
D21	G-5	Q201	C-7
D321	D-10	Q202	D-4
D501	B-1	Q203	D-4
D551	F-5	Q204	D-5
D552	F-5	Q251	C-7
D553	F-6	Q254	D-5
D554	G-3	Q322	D-10
D555	E-6	Q323	D-10
D556	E-6	Q324	D-10
D601	D-4	Q551	G-3

5-6. SCHEMATIC DIAGRAM –MAIN SECTION(1/2)–

• See page 11 for Waveforms.
• See page 20 for IC Pin Function.



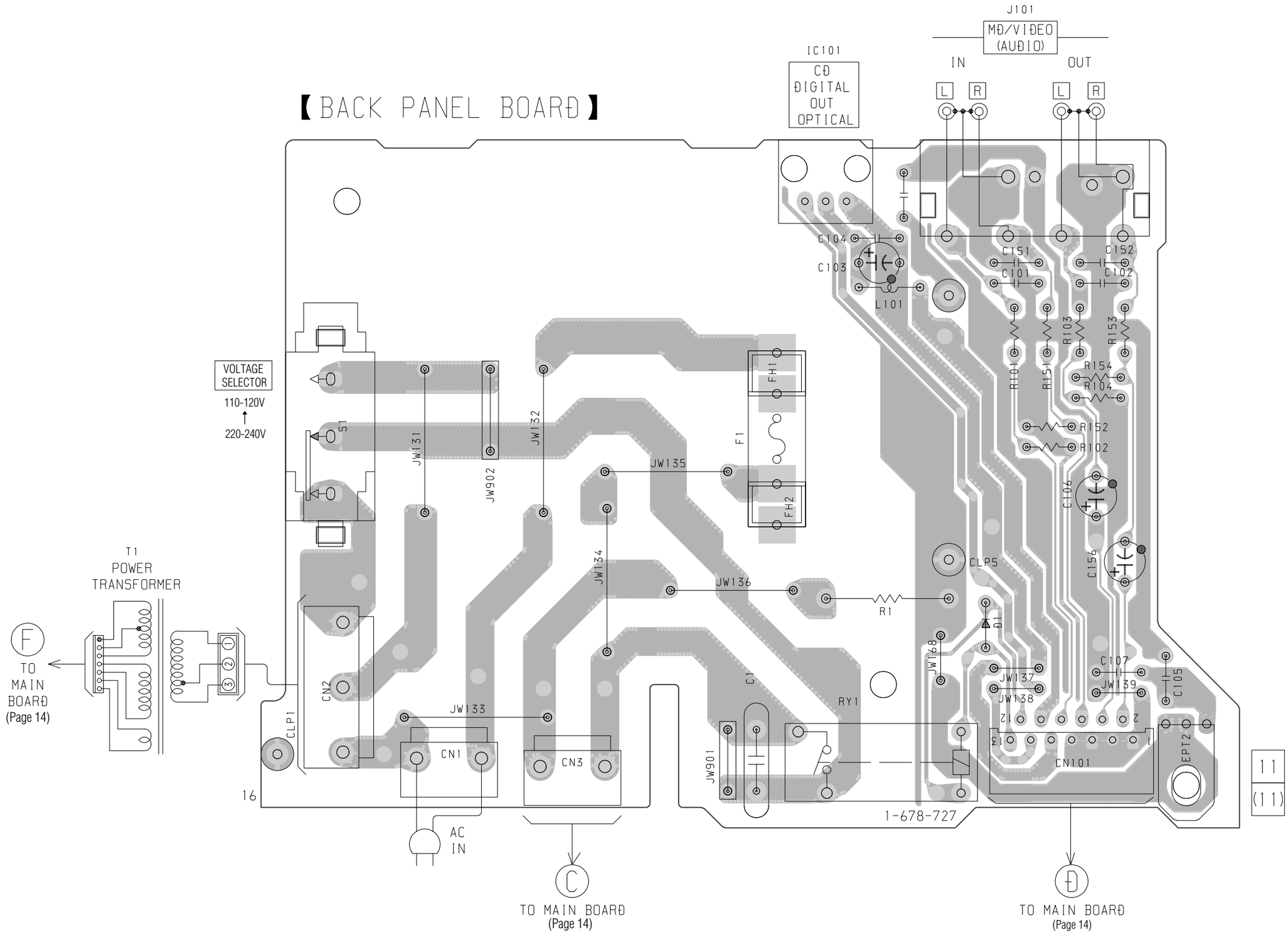
5-7. SCHEMATIC DIAGRAM –MAIN SECTION(2/2)– • See page 22 for IC Block Diagrams.



5-8. PRINTED WIRING BOARDS –POWER SECTION–

• See page 11 for Circuit Boards Location.

There are a few cases that the part printed on this diagram isn't mounted in this model.



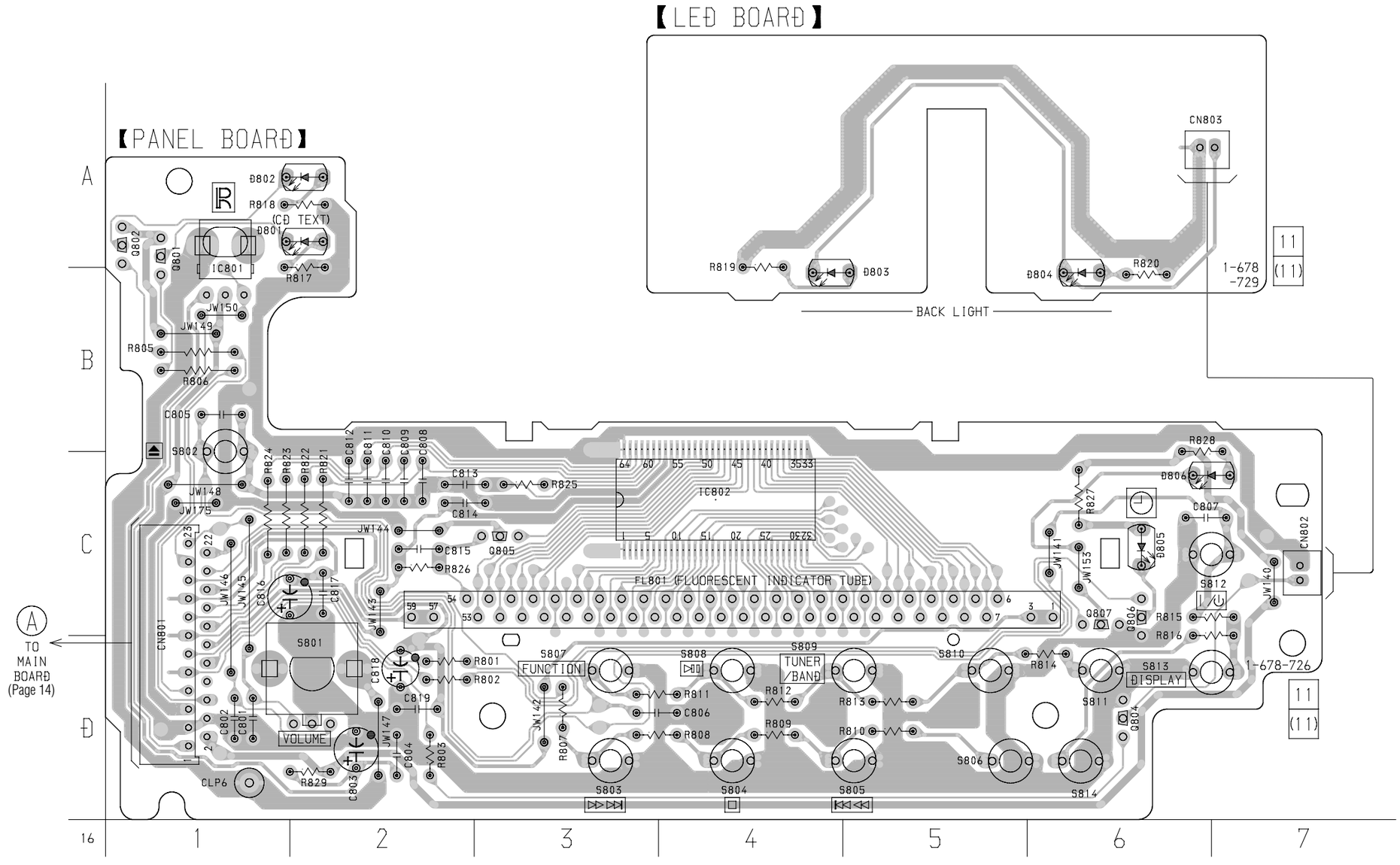
5-9. PRINTED WIRING BOARD –PANEL SECTION–

• See page 11 for Circuit Boards Location.

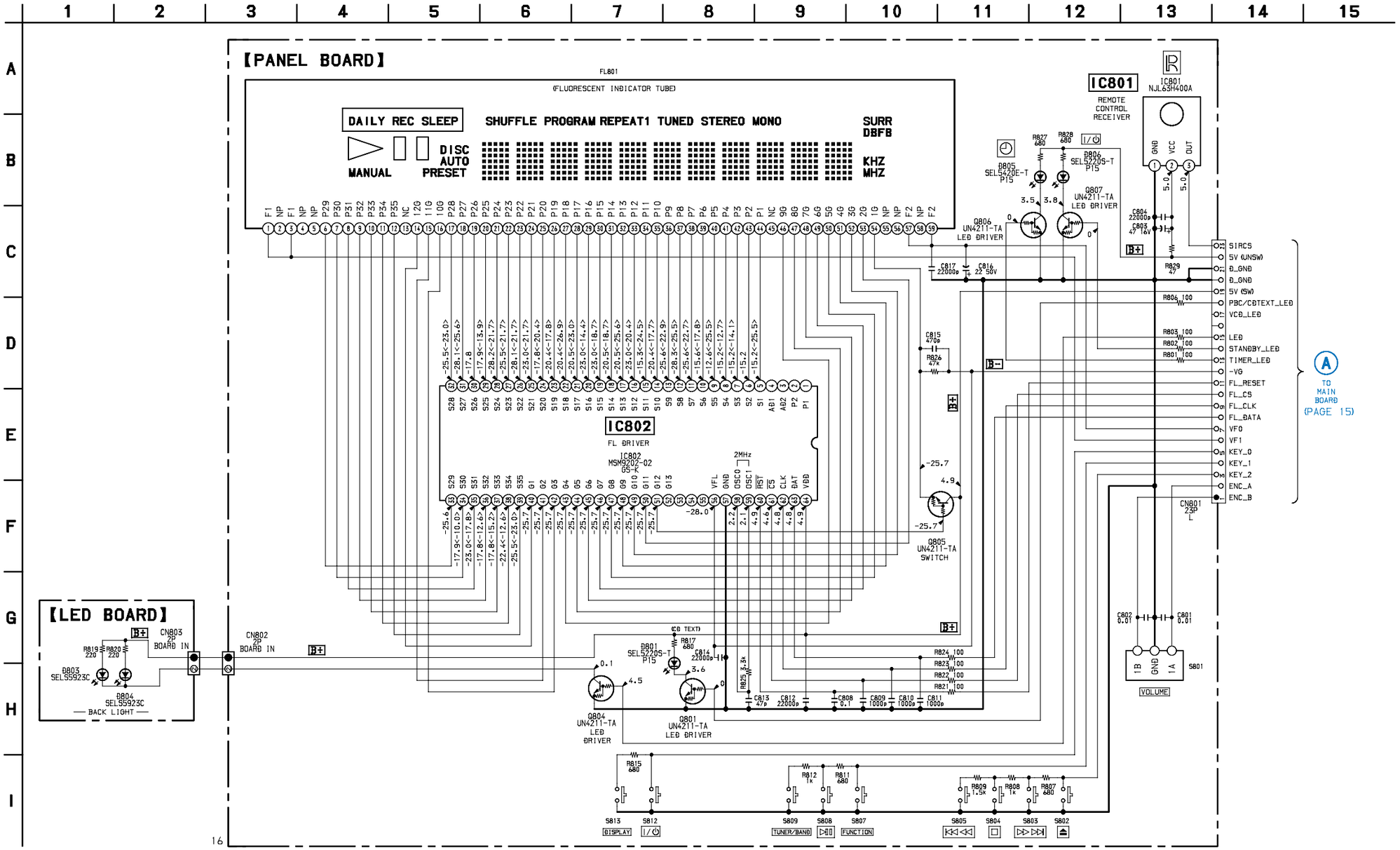
There are a few cases that the part printed on this diagram isn't mounted in this model.

• **Semiconductor Location**

Ref. No.	Location
D801	A-2
D805	C-6
D806	C-7
IC801	A-1
IC802	C-4
Q801	A-1
Q804	D-6
Q805	C-3
Q806	C-6
Q807	C-6

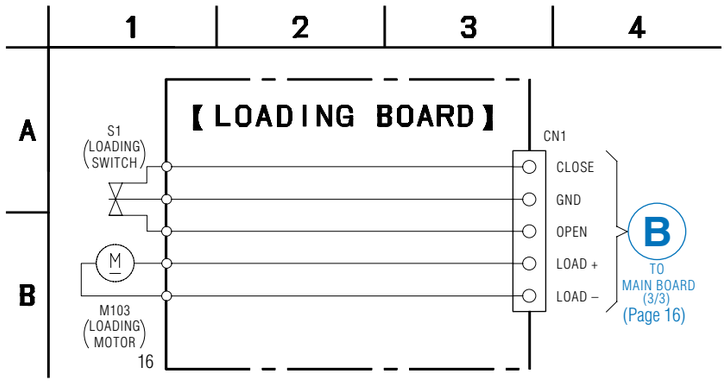


5-10. SCHEMATIC DIAGRAM –PANEL SECTION–

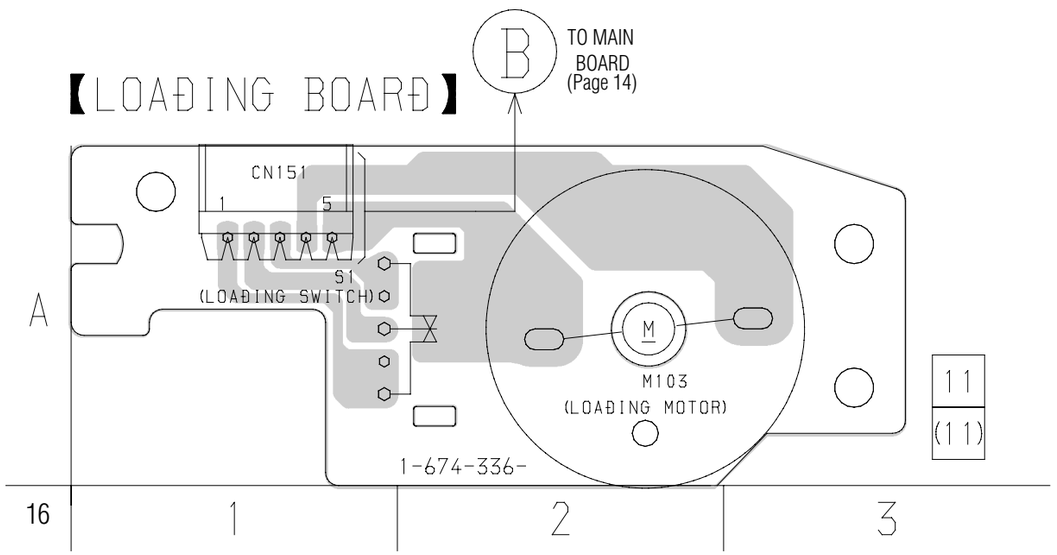


5-11. SCHEMATIC DIAGRAM –LOADING SECTION–

• See page 11 for Waveforms.



5-12. PRINTED WIRING BOARDS –LODING SECTION–



5-13. IC Pin Function

• MAIN BOARD IC601 M30622MAA-A64FP (SYSTEM CONTROLLER)

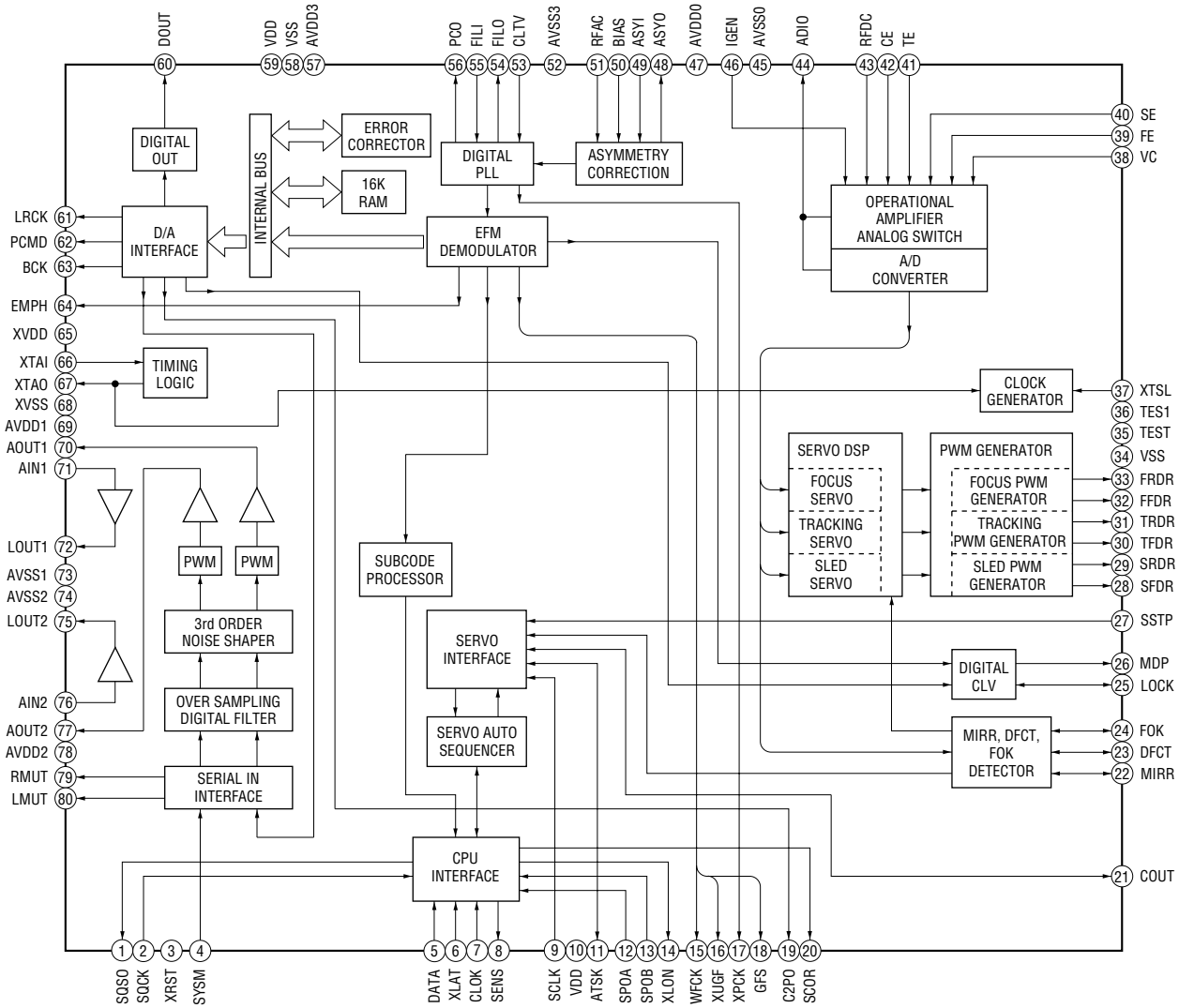
Pin No.	Pin Name	I/O	Description
1	STKPOWER	I	Not used. OPEN
2	B-SHUT	I	Not used. OPEN
3	SPEAKER RELAY	O	FRONT-RELAY ON(H)/OFF(L)
4	H.PHONE DETECT	I	HEAD PHONEs detection. Connected (H), Not connected (L).
5	CD-POWER	O	CD-POWER ON(H)/OFF(L)
6	TA-MUTE	O	Not used. OPEN
7	LED	—	Not used. OPEN
8	BYTE	—	For switching external data bus wedth
9	CNVss	—	For switching precessor mode
10	XCIN	I	SUB CLOCK IN
11	XCOUT	O	SUB CLOCK OUT
12	RESET	—	SYSTEM RESET IN
13	X0UT	O	MAIN SYSTEM CLOCK OUT
14	VSS	—	Vss
15	XIN	I	MAIN SYSTEM CLOCK IN(16MHz)
16	VCC	—	POWER SUPPLY(+5V)
17	NMI	I	PULL UP(EVER +5V) CAN'T USE
18	LED	—	Not used. OPEN
19	SCOR	I	CD Q-DATA REQUEST
20	RDS-INT	I	RDS INT
21	RDS-DATA	I	RDS DATA
22	AC-CUT	I	AC CUT ON(L)/OFF(H) CHECK
23	PBC/CDTEXT LED	O	CDTEXT LED (RB5) / PBC LED (VB5)
24	VCD LED	O	VCD_LED
25	CDTEXT LED	O	Not used. OPEN
26	PANEL LED	O	PANEL_LED
27	PRE MUTE	O	TA LINE-MUTE ON(L)/OFF(H)
28	FL-RESET	O	FL RESET
29	IIC_CLK	I	IIC SCL
30	IIC_DATA	I	IIC SDA
31	RXD	—	Not used. OPEN
32	SQ-DATA-IN	O	CD DATA IN
33	SQ-CLK	I	Note: SQ CLK : Input when CD-POWER is L
34	RTS1	O	Not used. OPEN
35	FL-DATA	O	FL DATA
36	FL-CS	O	FL CHIP SELECT
37	FL-CLK	O	FL CLK
38	VOL_CLK	O	LC75342 LATCH
39	STBY LED	O	STANDBY LED
40	TIMER LED	O	TIMER LED
41	VSS	—	FLASH VSS
42	RECOUT MUTE	—	FL FILAMENT ON(H)/OFF(L) (for ECO)
43	STBY_RELAY	O	Always O/H when power is OFF except for J, U and CED
44	AMP_MUTE	I	Always O/H when power is OFF except for J, U and CED
45	AMP_STANDBY	I	Always O/H when power is OFF except for J, U and CED
46	VDD	—	FLASH VDD
47	VOL_DATA	O	LC75342 DATA
48	VOL_CLK	O	LC75342 CLOCK
49	ST-MUTE	O	TUNER MUTE
50	STEREO	I	STEREO IN(L)/OFF(H)

Pin No.	Pin Name	I/O	Description
51	TUNED	I	TUNED IN(L)/OFF(H)
52	ST-CE	O	TUNER CHIP ENB
53	ST-DOUT	O	TUNER DATA OUT
54	ST-DIN	I	TUNER DATA IN
55	ST-CLK	O	TUNER CLOCK
56	SENS	I	From CXP2587 SENS
57	HOLD	O	MODE
58	XLTAT	O	CD LAT
59	XRST	O	CD RESET
60	LED	O	Not used. OPEN
61	LED	O	Not used. OPEN
62	VCC	—	POWER SUPPLY(+5V)
63	LED	O	Not used. OPEN
64	VSS	—	Vss
65	AMS-IN	I	Not used. OPEN
66	LOAD-OUT	O	LOAD OUT
67	LOAD-IN	O	LOAD IN
68	B-TRG	I	Not used. OPEN
69	CAPM-CNT1	I	Not used. OPEN
70	IN SW	I	CDM55 IN SW
71	OPEN-SW	I	TRAY OPEN switch
72	TC-MUTE	I	Not used. OPEN
73	REC/PB/PASS	I	Not used. OPEN
74	DOLBY NR	I	Not used. OPEN
75	REC-MUTE	I	Not used. OPEN
76	BIAS	I	Not used. OPEN
77	EQ-H/N	I	Not used. OPEN
78	TC-RELAY	I	Not used. OPEN
79	ALC	I	Not used. OPEN
80	B-PLAY-SW	I	Not used. OPEN
81	CD-DATA	O	CD DATA
82	CD-CLK	O	CD CLK
83	REC-OUT	I	Not used. OPEN
84	JOG A	I	Not used. OPEN
85	JOG B	I	Not used. OPEN
86	ENC A	I	volume(A)
87	ENC B	I	volume(B)
88	SIRCS	I	remote commander input
89	KEY0	I	KEY-line(0)
90	KEY1	I	KEY-line(1)
91	KEY2	I	KEY-line(2)
92	MD REC R	I	Not used. OPEN
93	B-HALF	I	Not used. OPEN
94	MD REC L	I	Not used. OPEN
95	MODEL-IN	I	CMT-RB5(GND) / CMT-VB5(Vdd)
96	AVSS	—	Analog ground
97	SPEC-IN	I	SPEC IN
98	VREF	—	Analog Reference Voltage
99	AVCC	—	Analog Power Supply
100	TEST	O	SOFT CHECK OUT

5-14. IC BLOCK DIAGRAMS

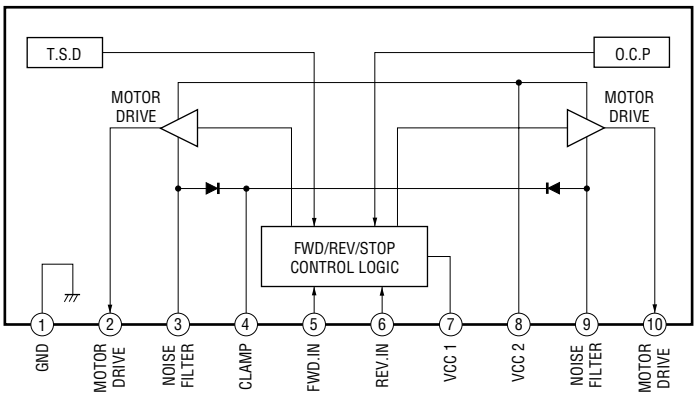
— BD BOARD —

IC101 CXD2587Q



— MAIN BOARD —

IC501 LB1641



SECTION 6
EXPLODED VIEWS

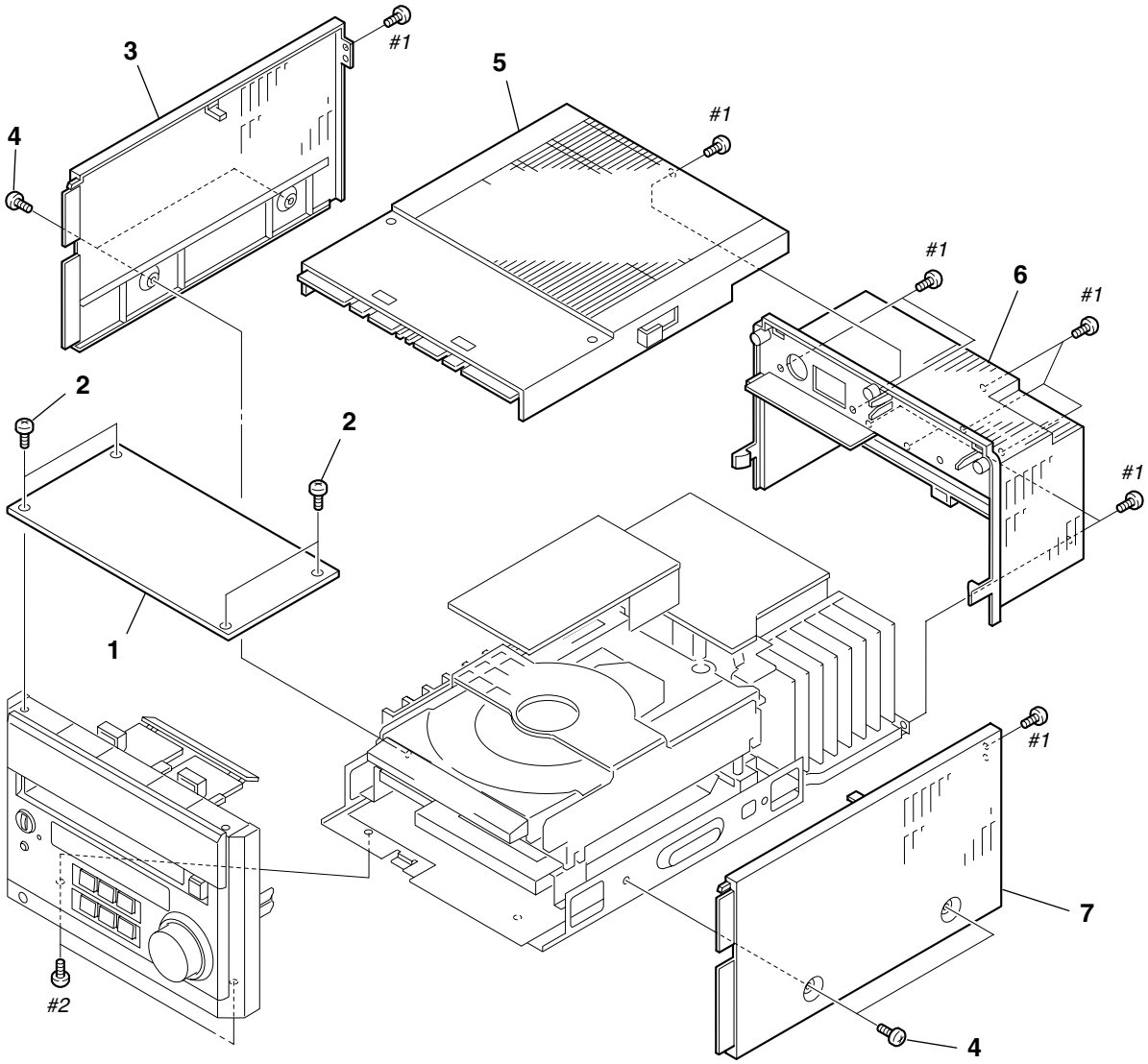
NOTE:

- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation
  - CND : Canadian model.
  - AUS : Australian model.
  - SP : Singapore model.
  - MY : Malaysia model.
  - AR : Argentine model.
  - AED : North European model.
  - MX : Mexican model.
  - KR : Korean model.
  - EE : East European model.
  - HK : Hong Kong model.
  - TW : Taiwan model.
  - CH : Chinese model.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
以阴影和⚠标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

6-1. CASE(TOP) SECTION

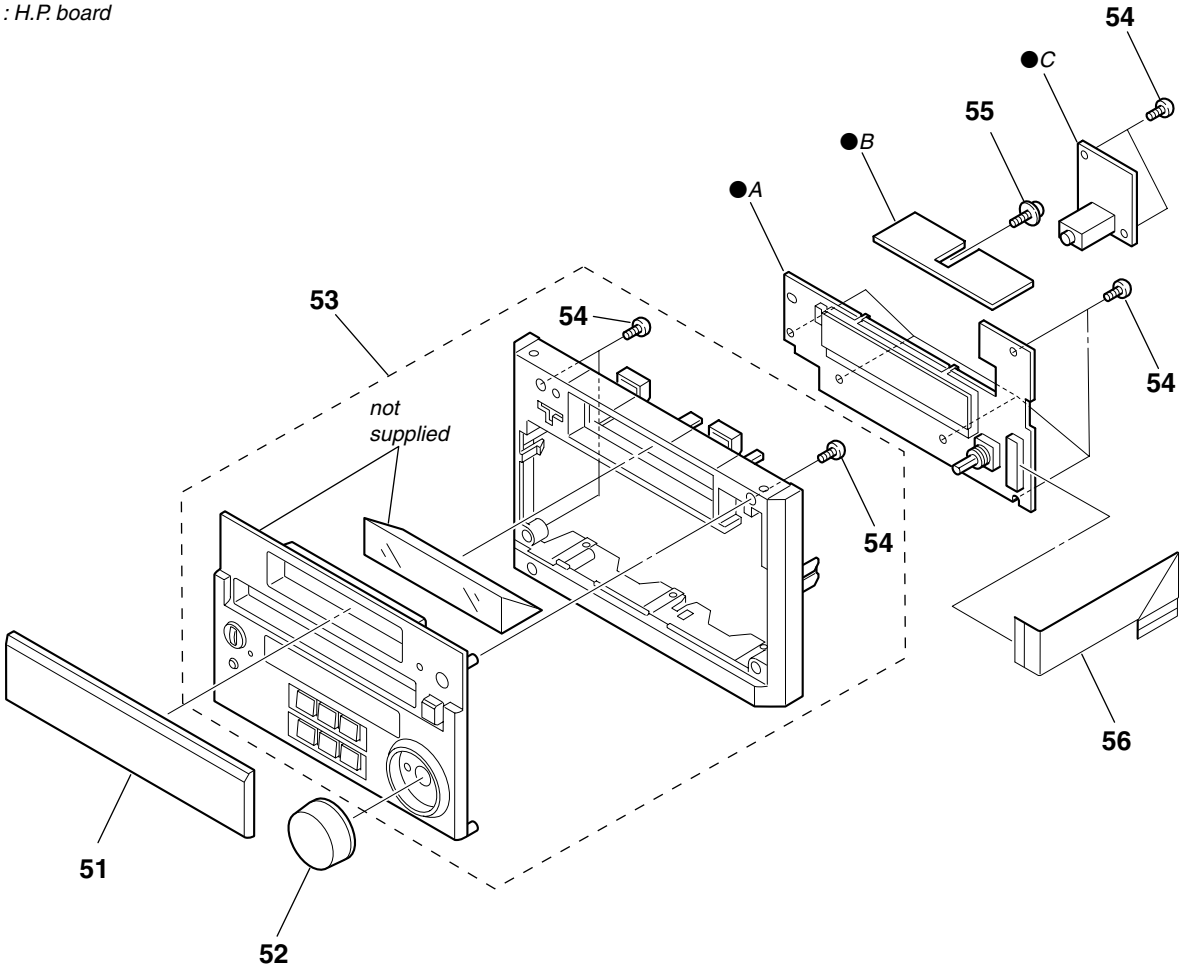


Ref. No.	Part No.	Description	Remarks
1	4-230-227-01	PLATE (TOP), ORNAMENTAL	
2	4-230-228-01	SCREW (TOP)	
3	4-230-225-01	CASE (LEFT)	
4	3-363-099-21	SCREW (CASE 3 TP2)	
5	4-230-224-01	CASE (TOP)	

Ref. No.	Part No.	Description	Remarks
6	4-230-222-01	PANEL, BACK (AEP,UK,AED,EE,CIS,CH)	
6	4-230-222-11	PANEL, BACK (US,CND,MX,KR,AUS)	
6	4-230-222-21	PANEL, BACK (E,AR,HK,SP,MY,TW)	
7	4-230-226-01	CASE (RIGHT)	

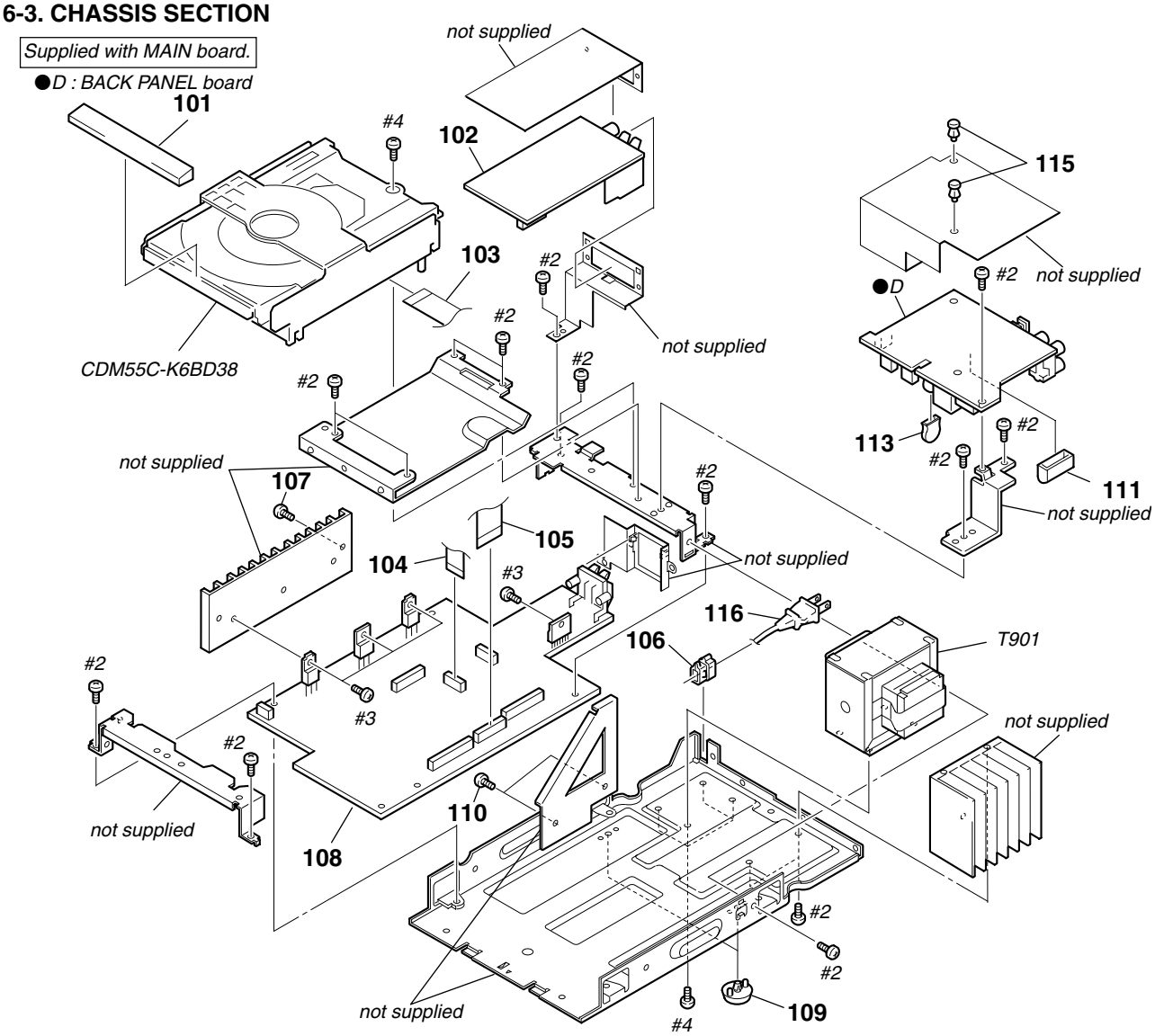
6-2. FRONT PANEL SECTION

Supplied with MAIN board.
- ●*A : PANEL board*
- ●*B : LED board*
- ●*C : H.P. board*



Ref. No.	Part No.	Description	Remarks
51	4-230-213-01	WINDOW (TOP) (US,CND,E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)	
51	4-230-213-11	WINDOW (TOP) (AEP,UK,AED,EE,CIS)	
52	4-230-202-01	KNOB (MAIN)	
53	X-4953-261-1	PANEL ASSY, FRONT	
54	4-951-620-01	SCREW (2.6X8), +BVTP	
55	4-933-134-11	SCREW (+PTPWH M2.6X8)	
56	1-765-343-11	WIRE (FLAT TYPE) (23 CORE)	

6-3. CHASSIS SECTION

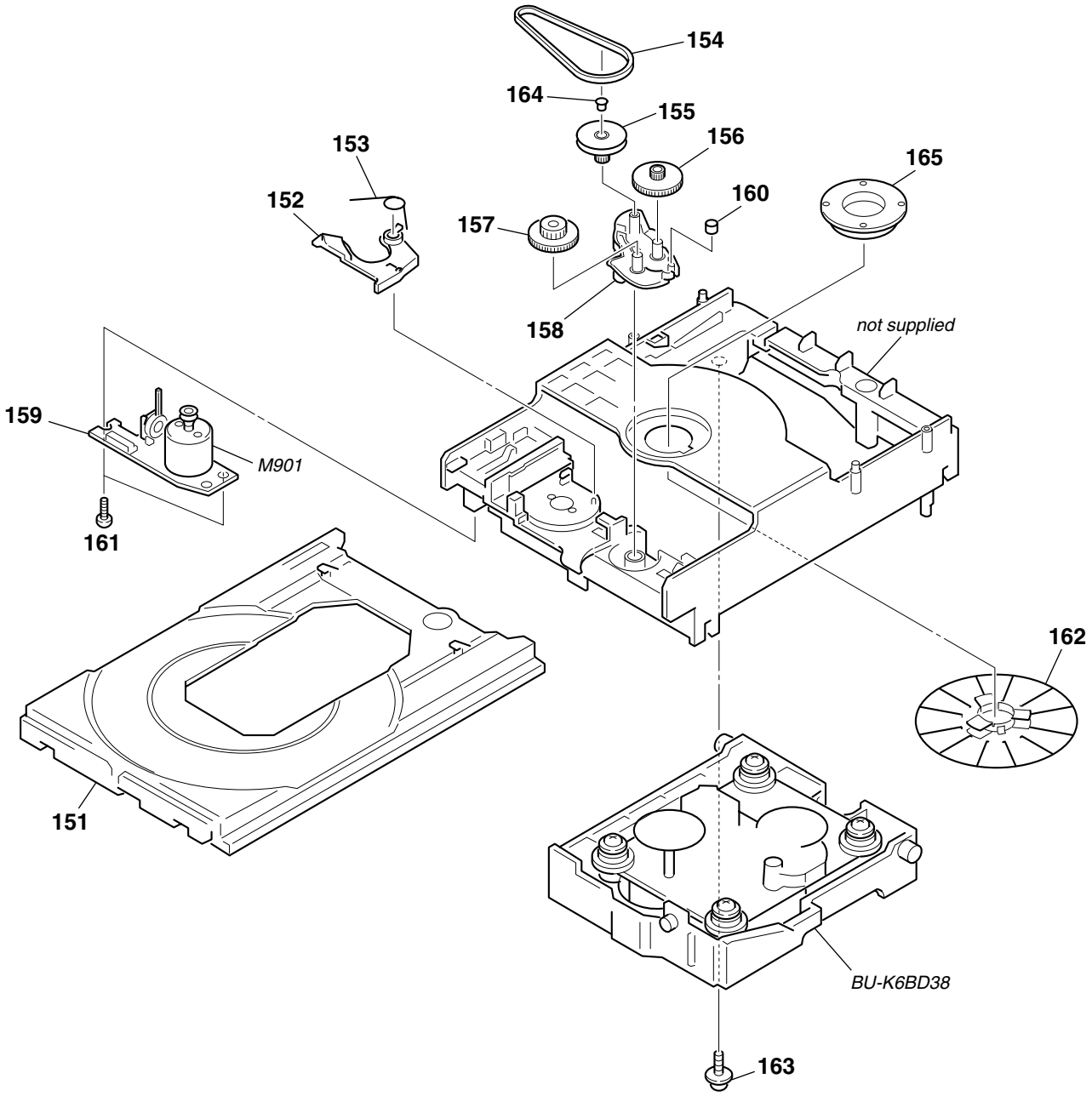


Ref. No.	Part No.	Description	Remarks
101	4-230-206-01	PANEL, LOADING	
102	1-693-481-11	TUNER (FM/AM) (US,CND)	
102	1-693-482-11	TUNER (FM/AM) (HK,SP,MY,KR,TW,AUS)	
102	1-693-484-11	TUNER (FM/AM) (E,MX,AR)	
102	1-693-490-11	TUNER (FM/AM) (AEP,UK,AED,EE,CIS,CH)	
103	1-757-267-11	WIRE, FLAT TYPE (19 CORE)	
104	1-757-266-11	WIRE, FLAT TYPE (13 CORE)	
105	1-769-980-11	WIRE (FLAT TYPE) (13 CORE)	(US,CND,E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)
105	1-773-013-11	WIRE (FLAT TYPE) (15 CORE)	(AEP,UK,AED,EE,CIS)
106	3-703-244-00	BUSHING (2104), CORD (EXCEPT E,MX)	
* 106	3-703-571-12	BUSHING (S) (4516), CORD (E,MX)	
107	3-704-515-11	SCREW (BV/RING)	
108	A-4475-310-A	MAIN BOARD, COMPLETE (US,CND)	
108	A-4475-315-A	MAIN BOARD, COMPLETE (AEP,UK,AED,EE,CIS)	
108	A-4475-320-A	MAIN BOARD, COMPLETE (E,MX,AR)	
108	A-4475-322-A	MAIN BOARD, COMPLETE	(HK,SP,MY,KR,TW,AUS)

Ref. No.	Part No.	Description	Remarks
108	A-4475-497-A	MAIN BOARD, COMPLETE (CH)	
109	4-965-822-01	FOOT	
110	3-970-608-01	SCREW SUMITITE(B3), +BV	
* 111	3-743-347-01	COVER, FUSE	
* 113	4-374-846-21	COVER, CAPACITOR, CAP TYPE_HCDRB5	
115	3-531-576-01	RIVET	
⚠116	1-775-787-41	CORD, POWER	(AEP,UK,AED,EE,CIS,HK,SP,MY,TW)
⚠116	1-775-790-41	CORD, POWER (AUS)	
⚠116	1-783-531-31	CORD, POWER (US,CND)	
⚠116	1-783-941-31	CORD, POWER (AR)	
⚠116	1-791-686-11	CORD, POWER (CH)	
⚠116	1-792-382-21	CORD, POWER (E,MX)	
⚠116	1-769-079-11	CORD, POWER (KR)	
⚠T901	1-435-652-11	TRANSFORMER, POWER (US,CND,MX)	
⚠T901	1-435-653-11	TRANSFORMER, POWER	(E,AR,HK,SP,MY,TW,CH)
⚠T901	1-435-654-11	TRANSFORMER, POWER	(AEP,UK,AED,EE,CIS,KR,AUS)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

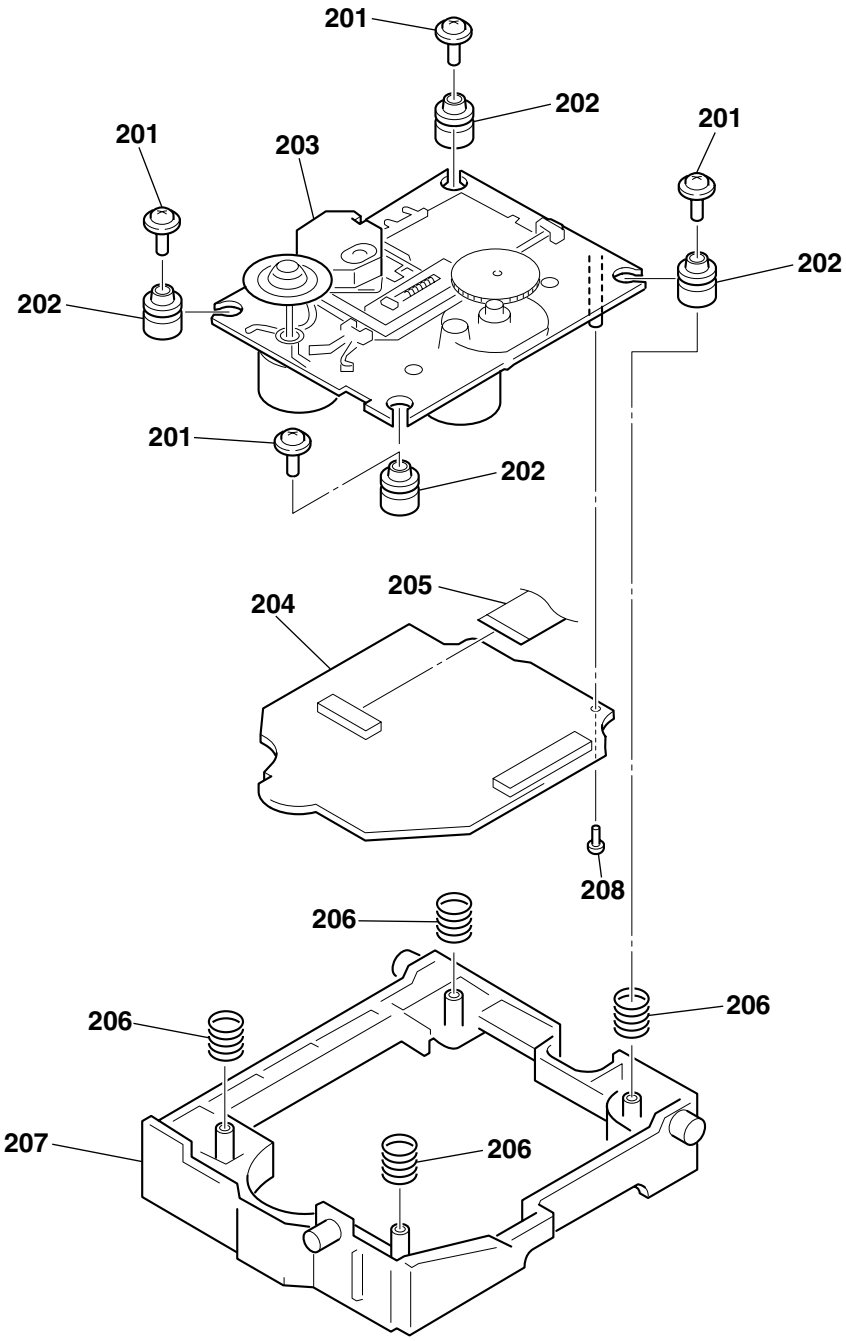
6-4. CD MECHANISM DECK SECTION (CDM55C-K6BD38)



Ref. No.	Part No.	Description	Remarks
151	4-224-894-11	TRAY (CDM55D)	
152	4-220-229-01	LEVER (SW)	
153	4-220-239-11	SPRING, TORSION	
154	4-221-816-11	BELT (CDM55)	
155	4-220-234-01	PULLEY (LDG)	
156	4-220-238-01	GEAR (B)	
157	4-220-237-01	GEAR (A)	
158	4-220-233-01	CAM (CDM55)	

Ref. No.	Part No.	Description	Remarks
159	1-674-336-21	LOADING BOARD	
160	4-221-815-01	ROLLER	
161	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
162	X-4953-195-1	PULLEY (AT) ASSY	
163	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
164	4-227-598-01	SPACER (55)	
164	1-452-925-21	MAGNET ASSY	
M901	A-4672-771-A	MOTOR (LD) ASSY (LOADING)	

6-5. BASE UNIT SECTION (BU-K6BD38)



Ref. No.	Part No.	Description	Remarks
201	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
202	4-227-679-01	INSULATOR (213)	
⚠203	8-820-116-01	OPTICAL PICK-UP KSM-213DCP/Z-NP	
204	A-4724-934-A	BD BOARD, COMPLETE	
205	1-792-024-11	WIRE (FLAT TYPE) (16 CORE)	
206	4-229-806-01	SPRING (213), COMPRESSION	
207	X-4953-169-1	HOLDER (BU) ASSY	
208	4-951-620-01	SCREW (2.6X8), +BVTP	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性．因此只能以规定号码的零部件来更换．

BACK PANEL **BD**

SECTION 7
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- Abbreviation
  CND : Canadian model.
  AUS : Australian model.
  SP : Singapore model.
  MY : Malaysia model.
  AR : Argentine model.
  AED : North European model.
  MX : Mexican model.
  KR : Korean model.
  EE : East European model.
  HK : Hong Kong model.
  TW : Taiwan model.
  CH : Chinese model.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

以阴影和⚠标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

Ref. No.	Part No.	Description			Remarks
		BACK PANEL BOARD			
		**********			
					(Supplied with MAIN board)
	1-533-293-11	FUSE HOLDER			
		< CAPACITOR >			
⚠C1	1-113-925-11	CERAMIC	0.01uF	20.00%	250V
					(US,CND,AEP,UK,AED,EE,CIS)
C101	1-162-282-31	CERAMIC	100PF	10%	50V
C102	1-162-282-31	CERAMIC	100PF	10%	50V
C103	1-104-665-11	ELECT	100uF	20.00%	10V
C105	1-164-159-11	CERAMIC	0.1uF		50V
C107	1-164-159-11	CERAMIC	0.1uF		50V
C108	1-164-159-11	CERAMIC	0.1uF		50V
C151	1-162-282-31	CERAMIC	100PF	10%	50V
C152	1-162-282-31	CERAMIC	100PF	10%	50V
		< CONNECTOR >			
CN1	1-774-108-11	PIN, CONNECTOR (PC BOARD)			
CN2	1-564-321-00	PIN, CONNECTOR 2P			
					(US,CND,AEP,UK,AED,EE,CIS,MX,KR,AUS)
* CN2	1-564-687-11	PIN, CONNECTOR 3P(E,AR,HK,SP,MY,TW,CH)			
* CN3	1-564-321-21	PIN, CONNECTOR 2P			
					(US,CND,AEP,UK,AED,EE,CIS)
CN101	1-784-735-11	CONNECTOR, FFC 13P			
		< DIODE >			
D1	8-719-911-19	DIODE 1SS133T-72			
					(US,CND,AEP,UK,AED,EE,CIS)
		< FUSE >			
⚠F1	1-532-389-51	FUSE TIME-LAG 0.5A/250V (MX)			
⚠F1	1-532-467-51	FUSE TIME-LAG 0.315A/250V			
					(AEP,UK,AED,EE,CIS,KR,AUS)
⚠F1	1-532-500-51	FUSE, CYLINDRICAL (TIME-LAG) 0.63A/250V			
					(E,AR,HK,SP,MY,TW,CH)
⚠F1	1-533-689-11	FUSE, GLASS CYLINDRICAL(DIA.5)1A/125V			
					(US,CND)
		< IC >			
IC101	8-749-923-04	IC TOTX178A (CD DIGITAL OUT OPTICAL)			
		< JACK >			
J101	1-766-851-11	JACK, PIN 4P (MD/VIDEO (AUDIO))			

Ref. No.	Part No.	Description			Remarks
		< RESISTOR >			
⚠R1	1-202-725-00	SOLID	3.3M	10%	1/2W
					(US,CND)
R101	1-249-417-11	CARBON	1K	5%	1/4W F
R102	1-249-441-11	CARBON	100K	5%	1/4W
R151	1-249-417-11	CARBON	1K	5%	1/4W F
R152	1-249-441-11	CARBON	100K	5%	1/4W
		< RELAY >			
⚠RY1	1-755-276-11	RELAY, POWER (US,CND,AEP,UK,AED,EE,CIS)			
		< SWITCH >			
⚠S1	1-762-753-11	SWITCH, VOLTAGE SELECTION			
					(VOLTAGE SELECT) (E,AR,HK,SP,MY,TW)
**********					
	A-4724-934-A	BD BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C102	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C103	1-163-005-11	CERAMIC CHIP	470PF	10%	50V
C104	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C108	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C109	1-163-011-11	CERAMIC CHIP	0.0015uF	10%	50V
C110	1-164-182-11	CERAMIC CHIP	0.0033uF	10%	50V
C111	1-163-251-11	CERAMIC CHIP	100PF	5.00%	50V
C112	1-107-682-11	CERAMIC CHIP	1uF	10.00%	16V
C114	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C115	1-104-665-11	ELECT	100uF	20.00%	10V
C116	1-104-665-11	ELECT	100uF	20.00%	10V
C117	1-104-665-11	ELECT	100uF	20.00%	10V
C118	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C119	1-163-235-11	CERAMIC CHIP	22PF	5.00%	50V
C121	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C122	1-104-665-11	ELECT	100uF	20.00%	10V
C123	1-163-021-91	CERAMIC CHIP	0.01uF	10.00%	50V
C124	1-107-823-11	CERAMIC CHIP	0.47uF	10.00%	16V
C125	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C126	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C127	1-104-665-11	ELECT	100uF	20.00%	10V
C129	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C130	1-164-346-11	CERAMIC CHIP	1uF		16V
C131	1-126-964-11	ELECT	10uF	20.00%	50V

Ref. No.	Part No.	Description			Remarks
C133	1-164-346-11	CERAMIC CHIP	1uF		16V
C140	1-164-346-11	CERAMIC CHIP	1uF		16V
C141	1-164-346-11	CERAMIC CHIP	1uF		16V
C143	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C145	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C153	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C159	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C162	1-104-665-11	ELECT	100uF	20.00%	10V
C163	1-104-665-11	ELECT	100uF	20.00%	10V
C165	1-163-038-11	CERAMIC CHIP	0.1uF		25V
C167	1-163-237-11	CERAMIC CHIP	27PF	5.00%	50V
C168	1-163-235-11	CERAMIC CHIP	22PF	5.00%	50V
C171	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C172	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C181	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C182	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
		< CONNECTOR >			
CN101	1-784-741-11	CONNECTOR, FFC 19P			
CN102	1-793-907-11	CONNECTOR, FFC/FPC 16P			
		< FERRITE BEAD >			
FB101	1-469-731-21	INDUCTOR	0UH		
FB103	1-469-731-21	INDUCTOR	0UH		
		< IC >			
IC101	8-752-386-85	IC CXD2587Q			
IC102	8-759-549-28	IC BA5974FP-E2			
IC103	8-752-085-51	IC CXA2568M-T6			
		< TRANSISTOR >			
Q101	8-729-010-08	TRANSISTOR	MSB710-RT1		
		< RESISTOR >			
R101	1-216-077-91	RES-CHIP	15K	5%	1/10W
R102	1-216-097-11	RES-CHIP	100K	5%	1/10W
R103	1-216-077-91	RES-CHIP	15K	5%	1/10W
R104	1-216-085-00	METAL CHIP	33K	5%	1/10W
R105	1-216-073-00	METAL CHIP	10K	5%	1/10W
R106	1-216-049-11	RES-CHIP	1K	5%	1/10W
R107	1-216-073-00	METAL CHIP	10K	5%	1/10W
R108	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
R109	1-216-121-11	RES-CHIP	1M	5%	1/10W
R110	1-216-025-11	RES-CHIP	100	5%	1/10W
R111	1-216-121-11	RES-CHIP	1M	5%	1/10W
R113	1-216-121-11	RES-CHIP	1M	5%	1/10W
R114	1-216-073-00	METAL CHIP	10K	5%	1/10W
R116	1-216-001-00	METAL CHIP	10	5%	1/10W
R117	1-216-049-11	RES-CHIP	1K	5%	1/10W
R118	1-216-025-11	RES-CHIP	100	5%	1/10W
R119	1-216-059-00	METAL CHIP	2.7K	5%	1/10W
R123	1-216-073-00	METAL CHIP	10K	5%	1/10W
R124	1-216-097-11	RES-CHIP	100K	5%	1/10W
R131	1-216-033-00	METAL CHIP	220	5%	1/10W
R143	1-216-103-00	METAL CHIP	180K	5%	1/10W
R144	1-216-103-00	METAL CHIP	180K	5%	1/10W
R147	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R148	1-216-001-00	METAL CHIP	10	5%	1/10W
R149	1-216-001-00	METAL CHIP	10	5%	1/10W

Ref. No.	Part No.	Description			Remarks
R158	1-216-111-00	METAL CHIP	390K	5%	1/10W
R159	1-216-101-00	METAL CHIP	150K	5%	1/10W
R162	1-216-101-00	METAL CHIP	150K	5%	1/10W
R171	1-216-078-00	RES-CHIP	16K	5%	1/10W
R172	1-216-073-00	METAL CHIP	10K	5%	1/10W
R173	1-216-077-91	RES-CHIP	15K	5%	1/10W
R181	1-216-078-00	RES-CHIP	16K	5%	1/10W
R182	1-216-073-00	METAL CHIP	10K	5%	1/10W
R183	1-216-077-91	RES-CHIP	15K	5%	1/10W
		< NETWORK >			
RN101	1-233-576-11	RES, CHIP NETWORK 100			
		< SWITCH >			
S101	1-771-853-11	SWITCH, DETECTION (LIMIT IN)			
		< VIBRATOR >			
X101	1-579-280-11	VIBRATOR, CRYSTAL 16.9344MHz			

****

H.P. BOARD
****
(Supplied with MAIN board)

< CAPACITOR >

C901	1-162-294-31	CERAMIC	0.001uF	10%	50V
C902	1-162-294-31	CERAMIC	0.001uF	10%	50V
C903	1-164-159-11	CERAMIC	0.1uF		50V
C951	1-162-294-31	CERAMIC	0.001uF	10%	50V

< JACK >

J901	1-785-569-11	JACK (SMALL TYPE) (PHONES)	

****

LED BOARD
****
(Supplied with MAIN board)

< DIODE >

D803	8-719-071-41	DIODE	SELS5923C-TP15
D804	8-719-071-41	DIODE	SELS5923C-TP15

****

	1-674-336-21	LOADING BOARD	
		**********	
		< CONNECTOR >	
* CN1	1-568-943-11	PIN, CONNECTOR 5P	
		< SWITCH >	
S1	1-771-799-11	SWITCH, LEVER (SLIDE) (LOADING)	

****

MAIN

Ref. No.	Part No.	Description			Remarks
	A-4475-310-A	MAIN BOARD, COMPLETE (US,CND)			
		**********			
	A-4475-315-A	MAIN BOARD, COMPLETE (AEP,UK,AED,EE,CIS)			
		**********			
	A-4475-320-A	MAIN BOARD, COMPLETE (E,MX,AR)			
		**********			
	A-4475-322-A	MAIN BOARD, COMPLETE			
		**********(HK,SP,MY,KR,TW,AUS)			
	A-4475-497-A	MAIN BOARD, COMPLETE (CH)			
		**********			
		< CAPACITOR >			
C2	1-136-165-00	FILM	0.1uF	5.00%	50V
C3	1-136-165-00	FILM	0.1uF	5.00%	50V
C4	1-128-548-11	ELECT	4700uF	20.00%	25V
C5	1-126-948-11	ELECT	100uF	20.00%	35V
C6	1-161-494-00	CERAMIC	0.022uF		25V
C7	1-126-933-11	ELECT	100uF	20.00%	16V
C8	1-136-165-00	FILM	0.1uF	5.00%	50V
C9	1-136-165-00	FILM	0.1uF	5.00%	50V
C10	1-126-768-11	ELECT	2200uF	20.00%	16V
C11	1-104-665-11	ELECT	100uF	20.00%	25V
C12	1-104-664-11	ELECT	47uF	20.00%	25V
C13	1-161-494-00	CERAMIC	0.022uF		25V
C15	1-104-664-11	ELECT	47uF	20.00%	25V
C16	1-128-551-11	ELECT	22uF	20.00%	25V
C17	1-104-664-11	ELECT	47uF	20.00%	25V
C18	1-128-551-11	ELECT	22uF	20.00%	25V
C19	1-126-965-11	ELECT	22uF	20.00%	50V
C20	1-126-965-11	ELECT	22uF	20.00%	50V
C21	1-126-967-11	ELECT	47uF	20.00%	50V
C22	1-164-159-11	CERAMIC	0.1uF		50V
C23	1-126-951-11	ELECT	470uF	20.00%	35V
C24	1-126-963-11	ELECT	4.7uF	20.00%	50V
			(US,CND,AEP,UK,AED,EE,CIS)		
C25	1-136-165-00	FILM	0.1uF	5.00%	50V
			(US,CND,AEP,UK,AED,EE,CIS)		
C26	1-136-165-00	FILM	0.1uF	5.00%	50V
			(US,CND,AEP,UK,AED,EE,CIS)		
C27	1-126-767-11	ELECT	1000uF	20.00%	16V
C28	1-128-551-11	ELECT	22uF	20.00%	25V
C29	1-126-967-11	ELECT	47uF	20.00%	50V
C30	1-164-159-11	CERAMIC	0.1uF		50V
C54	1-128-548-11	ELECT	4700uF	20.00%	25V
C201	1-126-964-11	ELECT	10uF	20.00%	50V
C202	1-136-172-00	MYLAR	0.39uF	5.00%	50V
C203	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C204	1-130-476-00	MYLAR	0.0027uF	5%	50V
C206	1-126-964-11	ELECT	10uF	20.00%	50V
C207	1-126-963-11	ELECT	4.7uF	20.00%	50V
C208	1-162-294-31	CERAMIC	0.001uF	10%	50V
C209	1-126-935-11	ELECT	470uF	20.00%	16V
C210	1-161-494-00	CERAMIC	0.022uF		25V
C211	1-128-551-11	ELECT	22uF	20.00%	25V
C214	1-107-715-11	ELECT	22uF	20.00%	16V
C215	1-126-963-11	ELECT	4.7uF	20.00%	50V
C216	1-126-963-11	ELECT	4.7uF	20.00%	50V
C217	1-126-963-11	ELECT	4.7uF	20.00%	50V
C219	1-126-964-11	ELECT	10uF	20.00%	50V
C221	1-162-290-31	CERAMIC	470PF	10%	50V

Ref. No.	Part No.	Description			Remarks
C251	1-126-964-11	ELECT	10uF	20.00%	50V
C252	1-136-172-00	MYLAR	0.39uF	5.00%	50V
C253	1-136-165-00	MYLAR	0.1uF	5.00%	50V
C254	1-130-476-00	MYLAR	0.0027uF	5%	50V
C256	1-126-964-11	ELECT	10uF	20.00%	50V
C257	1-126-963-11	ELECT	4.7uF	20.00%	50V
C265	1-126-963-11	ELECT	4.7uF	20.00%	50V
C266	1-126-963-11	ELECT	4.7uF	20.00%	50V
C267	1-126-963-11	ELECT	4.7uF	20.00%	50V
C269	1-126-964-11	ELECT	10uF	20.00%	50V
C271	1-162-290-31	CERAMIC	470PF	10%	50V
C302	1-161-494-00	CERAMIC	0.022uF		25V
C303	1-126-047-71	ELECT	4.7uF	20.00%	50V
C305	1-126-022-11	ELECT	47uF	20.00%	25V
C306	1-163-123-00	CERAMIC	180PF	5.00%	50V
C307	1-164-159-11	CERAMIC	0.1uF		50V
C308	1-164-159-11	CERAMIC	0.1uF		50V
C309	1-164-159-11	CERAMIC	0.1uF		50V
C310	1-164-159-11	CERAMIC	0.1uF		50V
C314	1-162-219-31	CERAMIC	68PF	5.00%	50V
C321	1-126-933-11	ELECT	100uF	20.00%	16V
C322	1-126-967-11	ELECT	47uF	20.00%	50V
C323	1-164-159-11	CERAMIC	0.1uF		50V
C352	1-161-494-00	CERAMIC	0.022uF		25V
C353	1-126-047-71	ELECT	4.7uF	20.00%	50V
C355	1-126-022-11	ELECT	47uF	20.00%	25V
C356	1-163-123-00	CERAMIC	180PF	5.00%	50V
C357	1-164-159-11	CERAMIC	0.1uF		50V
C358	1-164-159-11	CERAMIC	0.1uF		50V
C359	1-164-159-11	CERAMIC	0.1uF		50V
C360	1-164-159-11	CERAMIC	0.1uF		50V
C364	1-162-219-31	CERAMIC	68PF	5.00%	50V
C415	1-164-159-11	CERAMIC	0.1uF		50V
C419	1-162-300-11	CERAMIC	10000PF		
C417	1-126-917-11	ELECT	3300uF	20.00%	6.3V
C418	1-126-928-11	ELECT	3300uF	20.00%	10V
C431	1-126-935-11	ELECT	470uF	20.00%	16V
C435	1-126-935-11	ELECT	470uF	20.00%	6.3V
				(AEP,UK,AED,EE,CIS)	
C501	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C502	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C503	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C504	1-126-933-11	ELECT	100uF	20.00%	16V
C507	1-126-933-11	ELECT	100uF	20.00%	16V
C551	1-128-835-91	ELECT	1000uF	20%	10V
C552	1-104-664-11	ELECT	47uF	20.00%	16V
C553	1-164-159-11	CERAMIC	0.1uF		50V
C554	1-104-664-11	ELECT	47uF	20.00%	16V
C555	1-164-159-11	CERAMIC	0.1uF		50V
C556	1-164-159-11	CERAMIC	0.1uF		50V
C558	1-126-961-11	ELECT	2.2uF	20.00%	50V
C601	1-162-306-11	CERAMIC	0.01uF	30.00%	16V
C602	1-162-205-31	CERAMIC	18PF	5%	50V
C603	1-162-205-31	CERAMIC	18PF	5%	50V
C604	1-161-494-00	CERAMIC	0.022uF		25V
C605	1-161-494-00	CERAMIC	0.022uF		25V
C606	1-161-494-00	CERAMIC	0.022uF		25V
C607	1-161-494-00	CERAMIC	0.022uF		25V
C608	1-162-282-31	CERAMIC	100PF	10%	50V
C609	1-162-282-31	CERAMIC	100PF	10%	50V
C610	1-162-282-31	CERAMIC	100PF	10%	50V

Ref. No.	Part No.	Description			Remarks
C611	1-126-934-11	ELECT	220uF	20.00%	10V
C612	1-126-916-11	ELECT	1000uF	20.00%	6.3V
C613	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
* CN4	1-564-510-11	PLUG, CONNECTOR 7P			
CN5	1-564-321-21	PIN, CONNECTOR 2P (US,CND,AEP,UK,AED,EE,CIS)			
CN201	1-784-774-11	CONNECTOR, FFC 13P			
CN202	1-506-469-11	PIN, CONNECTOR 4P			
CN401	1-784-780-11	CONNECTOR, FFC 19P			
CN421	1-784-774-11	CONNECTOR, FFC 13P (US,CND,E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)			
CN421	1-784-776-11	CONNECTOR, FFC 15P (AEP,UK,AED,EE,CIS)			
CN441	1-784-784-11	CONNECTOR, FFC 23P			
* CN601	1-764-333-11	PLUG, CONNECTOR 10P			
		< DIODE >			
D2	8-719-500-56	DIODE D3SBA20			
D3	8-719-935-69	DIODE HZS11B1LTA			
D4	8-719-200-82	DIODE 11ES2-TA2B			
D5	8-719-200-82	DIODE 11ES2-TA2B			
D6	8-719-975-85	DIODE 21DQ04-TA2			
D7	8-719-975-85	DIODE 21DQ04-TA2			
D8	8-719-975-85	DIODE 21DQ04-TA2			
D9	8-719-975-85	DIODE 21DQ04-TA2			
D10	8-719-933-35	DIODE HZS6A3LTA			
D14	8-719-200-82	DIODE 11ES2-TA2B			
D15	8-719-200-82	DIODE 11ES2-TA2B			
D16	8-719-933-35	DIODE HZS6A3LTA			
D17	8-719-200-82	DIODE 11ES2-TA2B (US,CND,AEP,UK,AED,EE,CIS)			
D18	8-719-200-82	DIODE 11ES2-TA2B (US,CND,AEP,UK,AED,EE,CIS)			
D19	8-719-200-82	DIODE 11ES2-TA2B (US,CND,AEP,UK,AED,EE,CIS)			
D20	8-719-200-82	DIODE 11ES2-TA2B (US,CND,AEP,UK,AED,EE,CIS)			
D21	8-719-200-82	DIODE 11ES2-TA2B			
D321	8-719-911-19	DIODE 1SS133T-72			
D501	8-719-109-85	DIODE MTZJ-T-72-5.1B			
D551	8-719-911-19	DIODE 1SS133T-72			
D552	8-719-911-19	DIODE 1SS133T-72			
D553	8-719-911-19	DIODE 1SS133T-72			
D554	8-719-911-19	DIODE 1SS133T-72			
D555	8-719-911-19	DIODE 1SS133T-72			
D556	8-719-911-19	DIODE 1SS133T-72			
D601	8-719-911-19	DIODE 1SS133T-72			
		< GROUND >			
EPT1	1-537-770-21	TERMINAL BOARD, GROUND			
EPT2	1-537-770-21	TERMINAL BOARD, GROUND			
		< IC >			
IC1	8-759-039-69	IC uPC7805AHF			
IC2	8-759-450-49	IC BA07T			
IC3	8-759-633-42	IC M5293L			
IC4	8-759-450-47	IC BA05T			
IC201	8-759-669-03	IC LC75342			

Ref. No.	Part No.	Description				Remarks
IC202	8-759-634-51	IC M5218AP				
IC301	8-759-333-24	IC LM1876TF				
IC501	8-759-822-09	IC LB1641				
IC551	8-759-635-63	IC M51943BSL-TP				
IC601	8-759-679-09	IC M30622MAA-A64FP				
		< JACK >				
J301	1-694-677-11	TERMINAL BOARD (4P) (SPEAKER)				
		< COIL >				
L301	1-420-872-00	COIL, AIR-CORE				
L351	1-420-872-00	COIL, AIR-CORE				
L412	1-410-482-31	INDUCTOR	100uH			
		< IC LINK >				
⚠ PS1	1-806-881-11	THERMISTOR, POSITIVE 2.2				
⚠ PS4	1-202-854-00	THERMISTOR, POSITIVE				
		< TRANSISTOR >				
Q1	8-729-026-68	TRANSISTOR	2SD2525(TP)			
Q2	8-729-021-82	TRANSISTOR	2SD2396K			
Q3	8-729-620-05	TRANSISTOR	2SC2603TP-EF			
Q4	8-729-900-80	TRANSISTOR	UN4211-TA			
Q10	8-729-620-05	TRANSISTOR	2SC2603TP-EF (US,CND,AEP,UK,AED,EE,CIS)			
Q201	8-729-141-30	TRANSISTOR	2SC3623ATP-LK			
Q202	8-729-422-57	TRANSISTOR	UN4111-TA			
Q203	8-729-422-57	TRANSISTOR	UN4111-TA			
Q204	8-729-141-30	TRANSISTOR	2SC3623ATP-LK			
Q251	8-729-141-30	TRANSISTOR	2SC3623ATP-LK			
Q254	8-729-141-30	TRANSISTOR	2SC3623ATP-LK			
Q322	8-729-620-05	TRANSISTOR	2SC2603TP-EF			
Q323	8-729-620-05	TRANSISTOR	2SC2603TP-EF			
Q324	8-729-620-05	TRANSISTOR	2SC2603TP-EF			
Q551	8-729-620-05	TRANSISTOR	2SC2603TP-EF			
		< RESISTOR >				
R2	1-247-843-11	CARBON	3.3K	5%	1/4W	
R3	1-247-843-11	CARBON	3.3K	5%	1/4W	
R4	1-249-411-11	CARBON	330	5%	1/4W	
R5	1-249-417-11	CARBON	1K	5%	1/4W	F
R6	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R7	1-249-437-11	CARBON	47K	5%	1/4W	
R8	1-247-807-31	CARBON	100	5%	1/4W	
R9	1-247-807-31	CARBON	100	5%	1/4W	
⚠ R10	1-240-877-11	FUSIBLE	0.15	5%	1/2W	
R13	1-249-429-11	CARBON	10K (US,CND,AEP,UK,AED,EE,CIS)	5%	1/4W	
R201	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R202	1-247-807-31	CARBON	100	5%	1/4W	
R203	1-247-807-31	CARBON	100	5%	1/4W	
R204	1-247-807-31	CARBON	100	5%	1/4W	
R209	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R210	1-249-441-11	CARBON	100K	5%	1/4W	
R211	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R212	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R213	1-247-843-11	CARBON	3.3K	5%	1/4W	
R214	1-249-429-11	CARBON	10K	5%	1/4W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

MAIN

Ref. No.	Part No.	Description				Remarks
R215	1-249-430-11	CARBON	12K	5%	1/4W	
R216	1-249-417-11	CARBON	1K	5%	1/4W	F
R217	1-249-417-11	CARBON	1K	5%	1/4W	F
R218	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R219	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R220	1-247-843-11	CARBON	3.3K	5%	1/4W	
R221	1-249-417-11	CARBON	1K	5%	1/4W	F
R225	1-249-441-11	CARBON	100K	5%	1/4W	
R226	1-249-441-11	CARBON	100K	5%	1/4W	
R251	1-249-424-11	CARBON	3.9K	5%	1/4W	F
R259	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R260	1-249-441-11	CARBON	100K	5%	1/4W	
R261	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R264	1-249-429-11	CARBON	10K	5%	1/4W	
R265	1-249-430-11	CARBON	12K	5%	1/4W	
R267	1-249-417-11	CARBON	1K	5%	1/4W	F
R268	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R301	1-249-417-11	CARBON	1K	5%	1/4W	F
R302	1-249-434-11	CARBON	27K	5%	1/4W	
			(US,CND,AEP,UK,AED,EE,CIS)			
R302	1-249-433-11	CARBON	22K	5%	1/4W	
			(E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)			
R303	1-249-417-11	CARBON	1K	5%	1/4W	F
R304	1-249-434-11	CARBON	27K	5%	1/4W	
			(US,CND,AEP,UK,AED,EE,CIS)			
R304	1-249-433-11	CARBON	22K	5%	1/4W	
			(E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)			
R305	1-249-393-11	CARBON	10	5%	1/4W	F
R306	1-260-091-11	CARBON	220	5%	1/2W	
R307	1-249-437-11	CARBON	47K	5%	1/4W	
R308	1-260-076-11	CARBON	10	5%	1/2W	
R309	1-249-393-11	CARBON	10	5%	1/4W	F
R321	1-249-441-11	CARBON	100K	5%	1/4W	
R322	1-249-438-11	CARBON	56K	5%	1/4W	
R323	1-260-319-51	CARBON	180	5%	1/2W	
R351	1-249-417-11	CARBON	1K	5%	1/4W	F
R352	1-249-434-11	CARBON	27K	5%	1/4W	
			(US,CND,AEP,UK,AED,EE,CIS)			
R352	1-249-433-11	CARBON	22K	5%	1/4W	
			(E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)			
R353	1-249-417-11	CARBON	1K	5%	1/4W	F
R354	1-249-434-11	CARBON	27K	5%	1/4W	
			(US,CND,AEP,UK,AED,EE,CIS,CH)			
R354	1-249-433-11	CARBON	22K	5%	1/4W	
			(E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)			
R355	1-249-393-11	CARBON	10	5%	1/4W	F
R356	1-260-091-11	CARBON	220	5%	1/2W	
R357	1-249-438-11	CARBON	56K	5%	1/4W	
R358	1-260-076-11	CARBON	10	5%	1/2W	
R359	1-249-393-11	CARBON	10	5%	1/4W	F
R401	1-249-417-11	CARBON	1K	5%	1/4W	F
R402	1-249-429-11	CARBON	10K	5%	1/4W	
R403	1-247-807-31	CARBON	100	5%	1/4W	
R421	1-249-417-11	CARBON	1K	5%	1/4W	F
R422	1-249-437-11	CARBON	47K	5%	1/4W	
R451	1-249-417-11	CARBON	1K	5%	1/4W	F
R452	1-249-429-11	CARBON	10K	5%	1/4W	
R471	1-249-417-11	CARBON	1K	5%	1/4W	F
R472	1-249-437-11	CARBON	47K	5%	1/4W	
R501	1-247-807-31	CARBON	100	5%	1/4W	
R551	1-247-807-31	CARBON	100	5%	1/4W	
R552	1-249-413-11	CARBON	470	5%	1/4W	F
R553	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R554	1-249-437-11	CARBON	47K	5%	1/4W	
R555	1-249-437-11	CARBON	47K	5%	1/4W	
R556	1-249-429-11	CARBON	10K	5%	1/4W	
R557	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R558	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R559	1-249-417-11	CARBON	1K	5%	1/4W	F
R560	1-249-417-11	CARBON	1K	5%	1/4W	F
R561	1-249-421-11	CARBON	2.2K	5%	1/4W	F
			(US,CND,AEP,UK,AED,EE,CIS,HK,SP,MY,KR,TW,AUS,CH)			
R603	1-249-417-11	CARBON	1K	5%	1/4W	F
R604	1-249-417-11	CARBON	1K	5%	1/4W	F
R605	1-249-429-11	CARBON	10K	5%	1/4W	
R606	1-247-891-00	CARBON	330K	5%	1/4W	
R607	1-249-429-11	CARBON	10K	5%	1/4W	
R608	1-249-417-11	CARBON	1K	5%	1/4W	F
R609	1-249-417-11	CARBON	1K	5%	1/4W	F
R610	1-249-417-11	CARBON	1K	5%	1/4W	F
			(US,CND,E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)			
R610	1-249-441-11	CARBON	100K	5%	1/4W	
					(AEP,UK,AED,EE,CIS)	
R611	1-249-417-11	CARBON	1K	5%	1/4W	F
R612	1-249-417-11	CARBON	1K	5%	1/4W	F
			(US,CND,E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)			
R612	1-249-441-11	CARBON	100K	5%	1/4W	
					(AEP,UK,AED,EE,CIS)	
R614	1-249-417-11	CARBON	1K	5%	1/4W	F
R617	1-249-417-11	CARBON	1K	5%	1/4W	F
R620	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R621	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R622	1-247-807-31	CARBON	100	5%	1/4W	
R623	1-247-807-31	CARBON	100	5%	1/4W	
R624	1-247-807-31	CARBON	100	5%	1/4W	
R625	1-247-807-31	CARBON	100	5%	1/4W	
R626	1-247-807-31	CARBON	100	5%	1/4W	
R627	1-247-807-31	CARBON	100	5%	1/4W	
R629	1-249-417-11	CARBON	1K	5%	1/4W	F
R630	1-249-417-11	CARBON	1K	5%	1/4W	F
R631	1-247-807-31	CARBON	100	5%	1/4W	
R632	1-247-807-31	CARBON	100	5%	1/4W	
R633	1-247-807-31	CARBON	100	5%	1/4W	
					(US,CND,AEP,UK,AED,EE,CIS)	
R634	1-249-413-11	CARBON	470	5%	1/4W	F
R635	1-249-413-11	CARBON	470	5%	1/4W	F
R638	1-247-807-31	CARBON	100	5%	1/4W	
R639	1-249-417-11	CARBON	1K	5%	1/4W	F
R640	1-247-843-11	CARBON	3.3K	5%	1/4W	
R641	1-249-417-11	CARBON	1K	5%	1/4W	F
R642	1-249-429-11	CARBON	10K	5%	1/4W	
R643	1-247-807-31	CARBON	100	5%	1/4W	
R644	1-247-807-31	CARBON	100	5%	1/4W	
R645	1-249-417-11	CARBON	1K	5%	1/4W	F

Ref. No.	Part No.	Description				Remarks
R646	1-247-807-31	CARBON	100	5%	1/4W	
R647	1-249-417-11	CARBON	1K	5%	1/4W	F
R648	1-247-807-31	CARBON	100	5%	1/4W	
R649	1-249-417-11	CARBON	1K	5%	1/4W	F
R650	1-247-807-31	CARBON	100	5%	1/4W	
R651	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R652	1-249-433-11	CARBON	22K	5%	1/4W	
R655	1-247-807-31	CARBON	100	5%	1/4W	
R656	1-247-807-31	CARBON	100	5%	1/4W	
R659	1-249-417-11	CARBON	1K	5%	1/4W	F
R660	1-249-417-11	CARBON	1K	5%	1/4W	F
R670	1-249-413-11	CARBON	470	5%	1/4W	F
R671	1-249-417-11	CARBON	1K	5%	1/4W	F
R672	1-249-417-11	CARBON	1K	5%	1/4W	F
R673	1-249-429-11	CARBON	10K	5%	1/4W	
R674	1-249-417-11	CARBON	1K	5%	1/4W	F
R675	1-249-429-11	CARBON	10K	5%	1/4W	
R676	1-249-417-11	CARBON	1K	5%	1/4W	F
R677	1-249-417-11	CARBON	1K	5%	1/4W	F
R678	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R679	1-249-417-11	CARBON	1K	5%	1/4W	F
R680	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R681	1-249-417-11	CARBON	1K	5%	1/4W	F
R682	1-249-427-11	CARBON	6.8K	5%	1/4W	F
R687	1-249-425-11	CARBON	4.7K	5%	1/4W	F
			(US,CND,AEP,UK,E,AED,EE,CIS,MX,AR)			
R687	1-249-411-11	CARBON	330	5%	1/4W	
			(HK,SP,MY,KR,TW,AUS,CH)			
R688	1-249-407-11	CARBON	150	5%	1/4W	F
					(US,CND)	
R688	1-249-415-11	CARBON	680	5%	1/4W	F
					(AEP,UK,AED,EE,CIS)	
R688	1-249-421-11	CARBON	2.2K	5%	1/4W	F
					(E,MX,AR)	
R688	1-249-425-11	CARBON	4.7K	5%	1/4W	F
			(HK,SP,MY,KR,TW,AUS,CH)			
R689	1-249-429-11	CARBON	10K	5%	1/4W	
R692	1-249-429-11	CARBON	10K	5%	1/4W	
R693	1-249-429-11	CARBON	10K	5%	1/4W	
R695	1-249-429-11	CARBON	10K	5%	1/4W	
R696	1-249-429-11	CARBON	10K	5%	1/4W	
R819	1-249-409-11	CARBON	220	5%	1/4W	F
R820	1-249-409-11	CARBON	220	5%	1/4W	F
		< RELAY >				
RY301	1-755-170-11	RELAY (12V)				
		< TRANSFORMER >				
⚠T2	1-435-655-11	TRANSFORMER, POWER (US,CND)				
⚠T2	1-435-656-11	TRANSFORMER, POWER (AEP,UK,AED,EE,CIS)				
		< VIBRATOR >				
X601	1-567-098-41	VIBRATOR, CRYSTAL 32.768kHz				
X602	1-781-107-21	VIBRATOR, SERAMIC 16MHz				

****

Ref. No.	Part No.	Description				Remarks
		PANEL BOARD				
		**********				
						(Supplied with MAIN board)
	4-212-590-22	HOLDER (FL)				
*	4-949-935-51	CUSHION (FL)				
		< CAPACITOR >				
C801	1-162-306-11	CERAMIC	0.01uF	30.00%	16V	
C802	1-162-306-11	CERAMIC	0.01uF	30.00%	16V	
C803	1-124-589-11	ELECT	47uF	20%	16V	
C804	1-161-494-00	CERAMIC	0.022uF		25V	
C808	1-164-159-11	CERAMIC	0.1uF		50V	
C809	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C810	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C811	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C812	1-161-494-00	CERAMIC	0.022uF		25V	
C813	1-162-215-31	CERAMIC	47PF	5%	50V	
C814	1-161-494-00	CERAMIC	0.022uF		25V	
C815	1-162-290-31	CERAMIC	470PF	10%	50V	
C816	1-128-131-11	ELECT	22uF	20.00%	50V	
C817	1-161-494-00	CERAMIC	0.022uF		25V	
		< CONNECTOR >				
CN801	1-784-745-11	CONNECTOR, FFC 23P				
		< DIODE >				
D801	8-719-812-44	DIODE SEL5220S-TP15 (CD TEXT)				
D805	8-719-032-86	DIODE SEL5420E-TP15 (◴)				
D806	8-719-812-44	DIODE SEL5220S-TP15 (**I**/⏻)				
		< FILTER >				
FL801	1-517-805-12	INDICATOR TUBE, FLUORESCENT				
		< IC >				
IC801	8-759-459-85	IC NJL63H400A				
IC802	8-759-426-98	IC MSM9202-02GS-K				
		< TRANSISTOR >				
Q801	8-729-900-80	TRANSISTOR	UN4211-TA			
Q804	8-729-900-80	TRANSISTOR	UN4211-TA			
Q805	8-729-900-80	TRANSISTOR	UN4211-TA			
Q806	8-729-900-80	TRANSISTOR	UN4211-TA			
Q807	8-729-900-80	TRANSISTOR	UN4211-TA			
		< RESISTOR >				
R801	1-247-807-31	CARBON	100	5%	1/4W	
R802	1-247-807-31	CARBON	100	5%	1/4W	
R803	1-247-807-31	CARBON	100	5%	1/4W	
R806	1-247-807-31	CARBON	100	5%	1/4W	
R807	1-249-415-11	CARBON	680	5%	1/4W	F
R808	1-249-417-11	CARBON	1K	5%	1/4W	F
R809	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R811	1-249-415-11	CARBON	680	5%	1/4W	F
R812	1-249-417-11	CARBON	1K	5%	1/4W	F
R815	1-249-415-11	CARBON	680	5%	1/4W	F

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

PANEL

Ref. No.	Part No.	Description			Remarks
R817	1-249-415-11	CARBON	680	5%	1/4W F
R821	1-247-807-31	CARBON	100	5%	1/4W
R822	1-247-807-31	CARBON	100	5%	1/4W
R823	1-247-807-31	CARBON	100	5%	1/4W
R824	1-247-807-31	CARBON	100	5%	1/4W
R825	1-247-843-11	CARBON	3.3K	5%	1/4W
R826	1-249-437-11	CARBON	47K	5%	1/4W
R827	1-249-415-11	CARBON	680	5%	1/4W F
R828	1-249-415-11	CARBON	680	5%	1/4W F
R829	1-249-401-11	CARBON	47	5%	1/4W F
		< SWITCH >			
S801	1-418-632-11	ENCODER, ROTARY (VOLUME)			
S802	1-771-410-21	SWITCH, TACTILE (⏏)			
S803	1-771-410-21	SWITCH, TACTILE (▷▷ ▷▷⏸)			
S804	1-771-410-21	SWITCH, TACTILE (□)			
S805	1-771-410-21	SWITCH, TACTILE (⏮◁◁ ◁◁)			
S807	1-771-410-21	SWITCH, TACTILE (FUNCTION)			
S808	1-771-410-21	SWITCH, TACTILE (▷⏸)			
S809	1-771-410-21	SWITCH, TACTILE (TUNER/BAND)			
S812	1-771-410-21	SWITCH, TACTILE (I/⏻)			
S813	1-771-410-21	SWITCH, TACTILE (DISPLAY)			

****

MISCELLANEOUS
****

56	1-765-343-11	WIRE (FLAT TYPE) (23 CORE)
102	1-693-481-11	TUNER (FM/AM) (US,CND)
102	1-693-482-11	TUNER (FM/AM) (HK,SP,MY,KR,TW,AUS)
102	1-693-484-11	TUNER (FM/AM) (E,MX,AR)
102	1-693-490-11	TUNER (FM/AM) (AEP,UK,AED,EE,CIS,CH)

Ref. No.	Part No.	Description	Remarks
103	1-757-267-11	WIRE, FLAT TYPE (19 CORE)	
104	1-757-266-11	WIRE, FLAT TYPE (13 CORE)	
105	1-769-980-11	WIRE (FLAT TYPE) (13 CORE)	(US,CND,E,MX,AR,HK,SP,MY,KR,TW,AUS,CH)
105	1-773-013-11	WIRE (FLAT TYPE) (15 CORE)	(AEP,UK,AED,EE,CIS)
⚠116	1-775-787-41	CORD, POWER	(AEP,UK,AED,EE,CIS,HK,SP,MY,TW)
⚠116	1-775-790-41	CORD, POWER (AUS)	
⚠116	1-783-531-31	CORD, POWER (US,CND)	
⚠116	1-783-941-31	CORD, POWER (AR)	
⚠116	1-792-382-21	CORD, POWER (E,MX)	
⚠116	1-769-079-11	CORD, POWER (KR)	
⚠116	1-769-689-11	CORD, POWER (CH)	
⚠203	8-820-116-01	OPTICAL PICK-UP KSM-213DCP/Z-NP	
205	1-792-024-11	WIRE (FLAT TYPE) (16 CORE)	
⚠T901	1-435-652-11	TRANSFORMER, POWER (US,CND,MX)	
⚠T901	1-435-653-11	TRANSFORMER, POWER	(E,AR,HK,SP,MY,TW,CH)
⚠T901	1-435-654-11	TRANSFORMER, POWER	(AEP,UK,AED,EE,CIS,KR,AUS)

****

ACCESSORIES & PACKING MATERIALS
****

⚠	1-569-008-21	ADAPTOR, CONVERSION 2P (SP,MY,TW)
⚠	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK,HK)

****

****
HARDWARE LIST
****

#1	7-685-647-79	SCREW +BVTP3X10 TYPE2 N-S
#2	7-685-646-79	SCREW +BVTP3X8 TYPE2 IT-3
#3	7-682-148-01	SCREW +P3X8
#4	7-685-871-01	SCREW +BVTT3X6 (S)

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Sony Corporation
Audio Entertainment Group

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SS-CRB5/CVB5

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
Australian Model
Chinese Model
SS-CRB5
E Model
SS-CRB5/CVB5

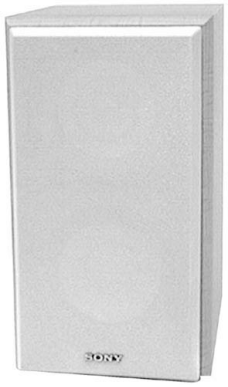


Photo : SS-CRB5

- This set is the speaker system in CMT-RB5/VB5.

SPECIFICATIONS

Speaker system	2-way, bass-reflex type
Speaker units	
Woofer :	10 cm dia., cone type
Tweeter :	5 cm dia., cone type
Nominal impedance	4 ohms
Dimensions (w/h/d)	Approx. 145 × 255 × 210 mm
Mass	Approx. 2.7 kg net per speaker

SPEAKER SYSTEM

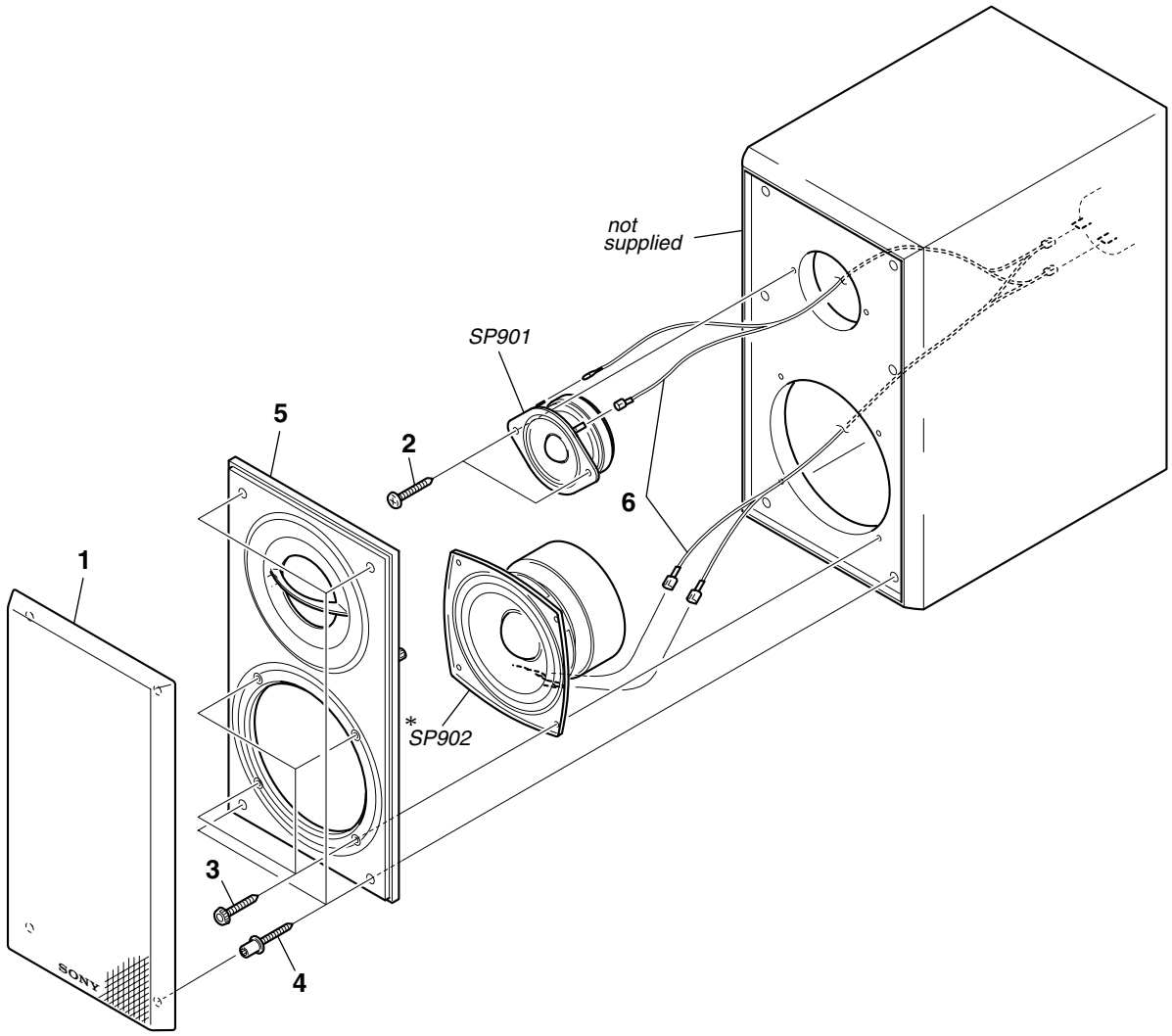
SONY®

EXPLODED VIEW AND PARTS LIST

NOTE:
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay shoud be anticipated when ordering these items.

* : SP902

The model name is printed on the rear side of the speaker.



Ref. No.	Part No.	Description	Remarks
1	X-4953-051-1	FRAME ASSY, GRILLE (CRB5) (LIGHT GRAY)	
1	X-4953-262-1	FRAME ASSY, GRILLE (CVB5) (DARK GRAY)	
2	4-874-614-11	SCREW (4) (3.5X14), TAPPING	
3	4-932-425-01	SCREW (3.5X20)	
4	4-229-774-01	SCREW, ORNAMENTAL	

Ref. No.	Part No.	Description	Remarks
5	X-4953-050-1	PANEL ASSY, FRONT	
6	1-757-017-11	CORD, CONNECTION	
SP901	1-529-801-11	SPEAKER (TWEETER)(5cm)	
SP902	1-529-802-11	SPEAKER (WOOFER)(10cm)(CRB5)	
SP902	1-529-900-11	SPEAKER (WOOFER)(10cm)(CVB5)	

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